

NEW
ELEMENTARY
GEOGRAPHY

REVISED EDITION, 1915



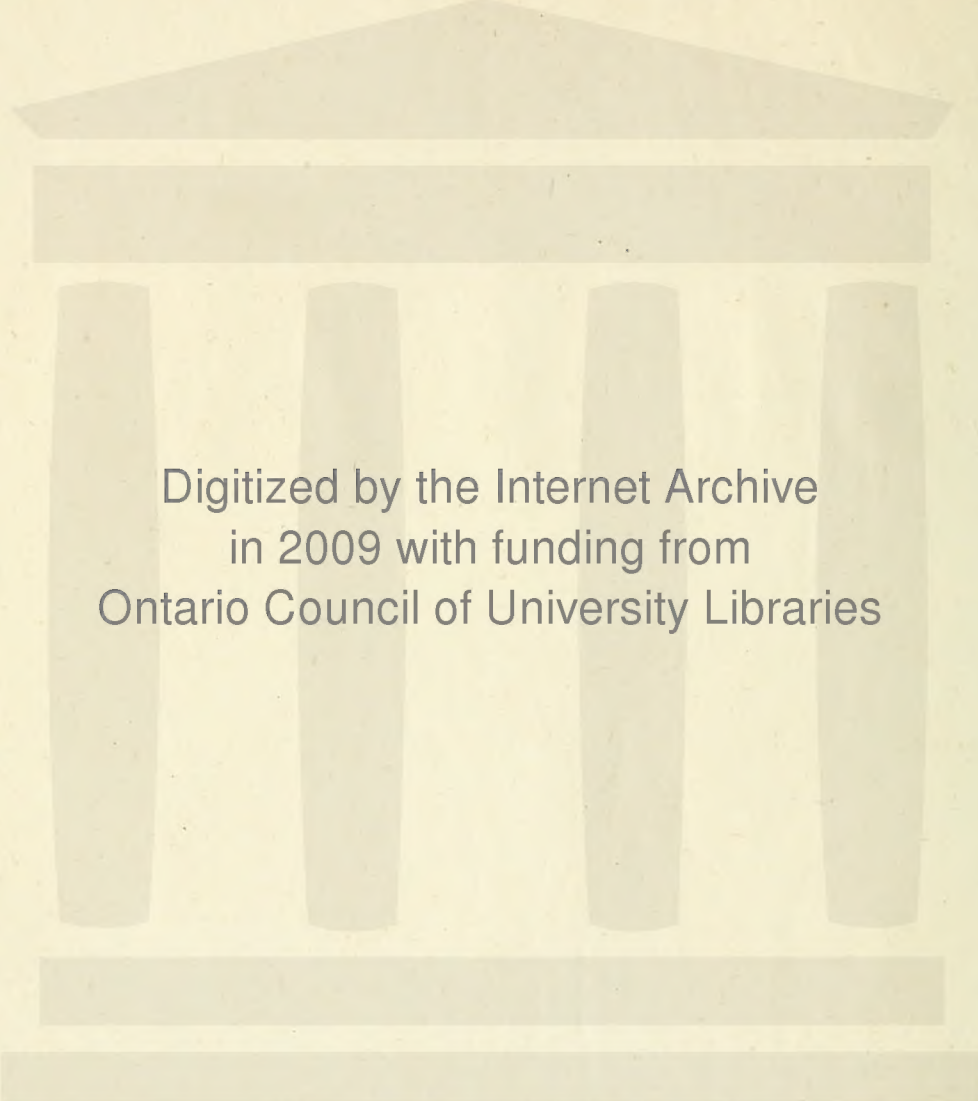
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NEW ELEMENTARY GEOGRAPHY

ADAPTED FOR USE IN

CANADIAN SCHOOLS

Prescribed by the Board of Education for use in the Schools of Quebec

REVISED EDITION, 1915

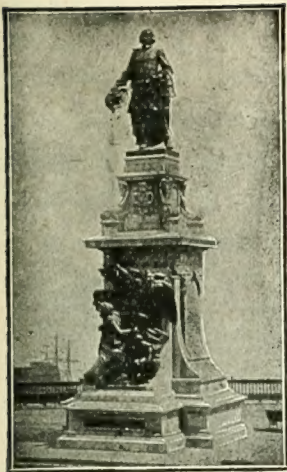


THE EDUCATIONAL BOOK CO., LIMITED
TORONTO

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PREFACE.



Champlain's Monument,
Quebec.

THIS Geography is designed for a pupil's first text-book in the subject, and recognizes the fact that geography for schools should be *a practical study of man's physical surroundings in their relations to him.* Hence the central idea of the treatment is *man*,—his history, customs, industries, and commercial relations as determined or modified by the forces of nature.

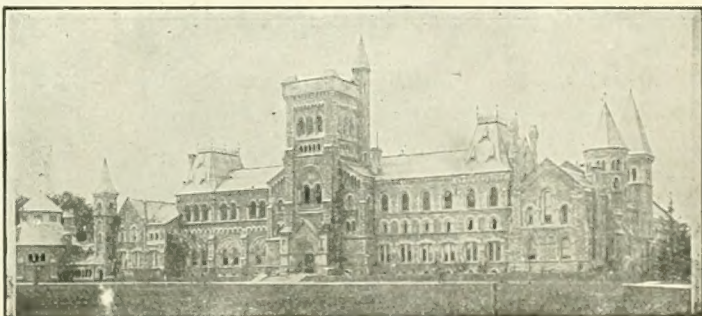
It recognizes, further, the fact that *one of the most important functions of elementary geography is to teach the names, locations, and characteristics of the countries* into which man has divided the earth. These are the units of the world's geographical intercourse. A knowledge of them constitutes the proper foundation for the study of geography in more advanced grades; while *it fits the large proportion of pupils who leave school at an early age to understand the countless geographical references which they will encounter in daily life.*

It points out the great divisions of the inhabitants of the earth into separate groups according to race and speech, in each of which there is an essential similarity of manners, customs, and general views of life. The provinces and territories of Canada are studied in groups that are simple and practical, being in accordance with the historical development of the Dominion and in conformity with its physical geography.

This book develops the subject upon a definite and natural plan, and in harmony with approved principles of teaching. *Each lesson, while complete in itself, paves the way to the following lesson.* The pupil is led from that which is perfectly familiar and within easy range of his observation, to form correct ideas of things that are remote and strange; and not until such notions have been formed are these things named or defined. *Generalizations are demanded only after the materials for their formation have been studied.* The pupil's own country is presented early in the treatment, and then all other countries are studied in their relations to it.

The subject is treated simply and sensibly. The book keeps well within the range of the pupil's comprehension, but never descends to baby talk or other artificial means to hold his attention.

The pupil is required to work rather than the teacher, and at the same time the book excites the interest of both pupil and teacher and stimulates them



University College, Toronto.



Victoria Jubilee Bridge, Montreal.

to independent thought. *The text abounds in questions that inspire thought, and, at the end of the treatment of each grand division, carefully prepared exercises lead to the comparison of the parts of the subject already studied, and form a thorough review of the pupil's work.*

The text exemplifies the fundamental laws of composition, and may be used in language work. In many lessons the chief topic is introduced by easy questions and exercises that prepare the pupil to understand the text of that section. At the end of the treatment *carefully prepared test questions help to fix the leading facts of the lesson* and also to enlarge the pupil's knowledge.

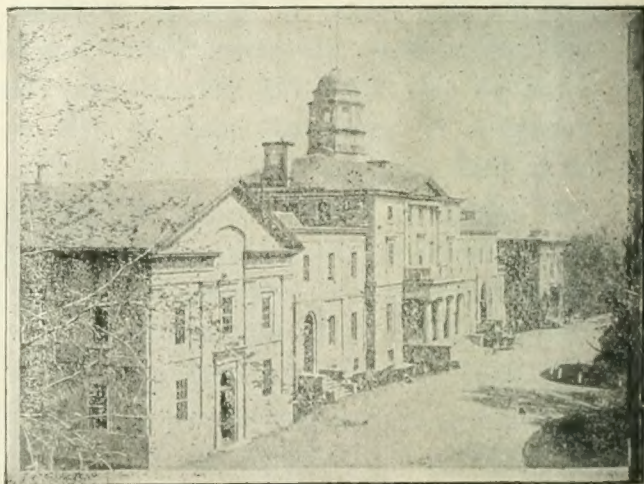
It recognizes *the value of map-drawing* in elementary geography, and introduces it in such manner that it shall be properly used *as means to an end*, and not as an end in itself.

The relief maps contain the names of the features represented, and require no accessories to adapt them for practical use.

The maps of corresponding divisions of the land are drawn on the same scale, so that relative areas are accurately depicted and may be directly compared. Thus a single scale serves for all the maps of the grand divisions.

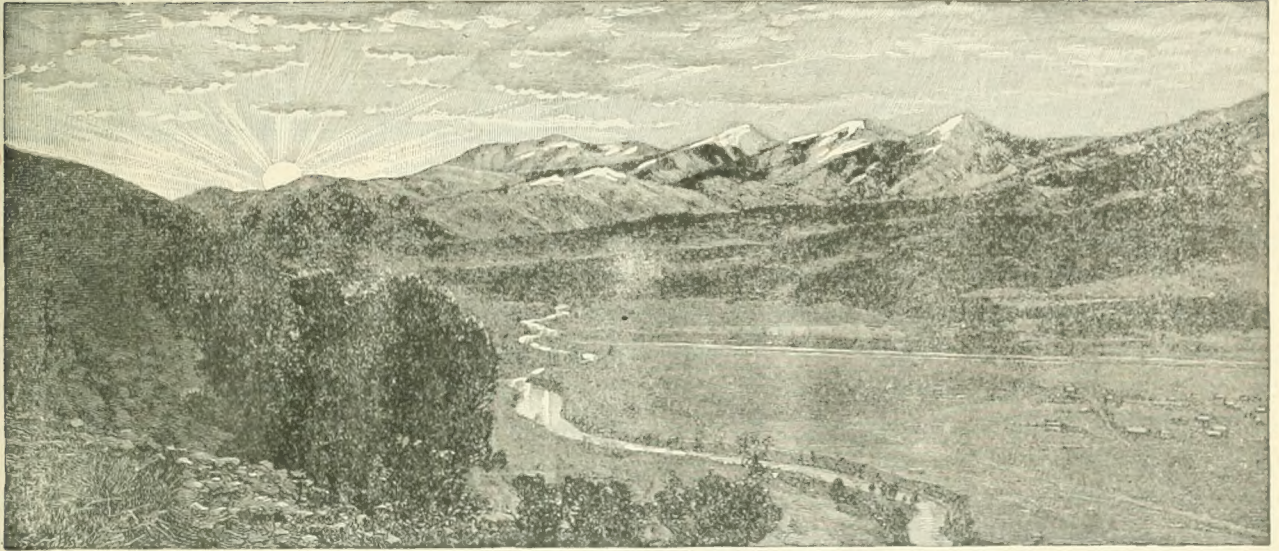
The pictures, most of which have been reproduced from photographs, *are of simple subjects within the comprehension of young pupils*, and they have been arranged upon the pages in such manner and in such numbers that *they serve a really useful purpose in illustrating the text*. Those used to illustrate the chapter on Canada have been selected with special care, setting before the eye the resources and the development of our beloved country.

The present edition has been carefully revised and the text brought up to date. The statistics have been removed from the text and inserted in a supplement at the back of the book. The part devoted to the British Empire has been greatly enlarged. Seven pages of geographical names, giving their pronunciation, have been included in the Supplement. New maps of the Dominion, Quebec, Newfoundland, Ontario, the Prairie Provinces, New Brunswick, Nova Scotia, and Prince Edward Island, Eastern Canada, and the Eastern States, British Columbia, the British Empire, and the United States are inserted.



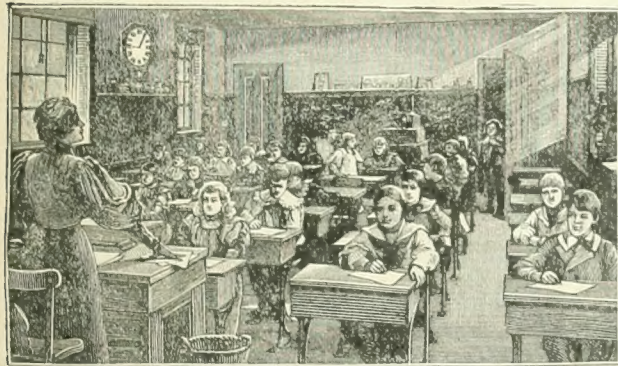
Arts Building, McGill University.

ELEMENTARY GEOGRAPHY.



1. Direction — East and West.

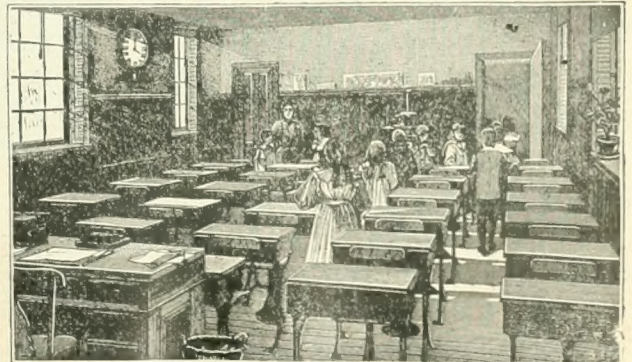
Here is a picture of a schoolroom. Can you

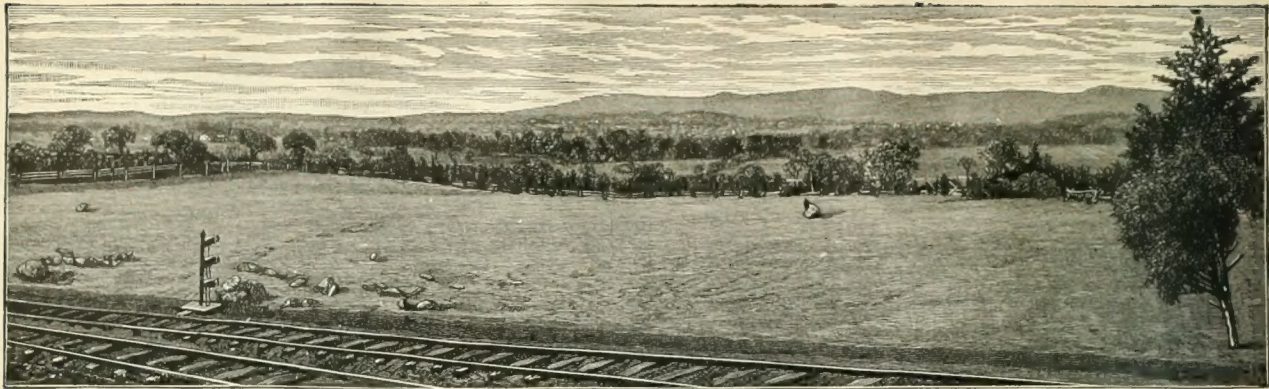


tell what time it is by the clock? The boy coming in at the door has been playing in the sunshine on his way to school, and is a little late. The sunshine comes into the schoolroom, too.

Here is another picture of the same schoolroom. What time is it by the clock in this

picture? It is late in the afternoon, school has just closed, and the pupils are going home. Is the sunshine still coming into the schoolroom? Does it enter at the same windows through which it came in the morning? Through which windows in the picture does it come in the afternoon? Through which windows does it shine in the morning? On which side of the schoolroom is the sun in the morning? On which side is the sun in the afternoon? So the





The land stretches out from us as far as we can see.

sun is on one side of the room in the morning, but on the opposite side in the afternoon.

Does the sun shine into your schoolroom in the morning? In the afternoon? Can you point to a window through which the sun shines in the morning, but not in the afternoon? To one through which it shines only in the afternoon? Can you point in the direction toward sunset? The side of the room toward the sunset is called the *west* side. Now can you point toward sunrise? The side of the room toward sunrise is the *east* side.

Notice which side of your schoolhouse the sun shines on *late* this afternoon, and which side it shines on *early* to-morrow morning, for in the next lesson you will have to point out the east side and the west side of your schoolroom.

The sun shines on one side of the house in the morning, but on the other or opposite side in the afternoon. The direction toward sunrise is called east, and the side of the house or room toward the early morning sun is the east side. The direction toward sunset is called west, and the side of the room or house toward the late afternoon sun is the west side.

2. The Land Ends toward the East.

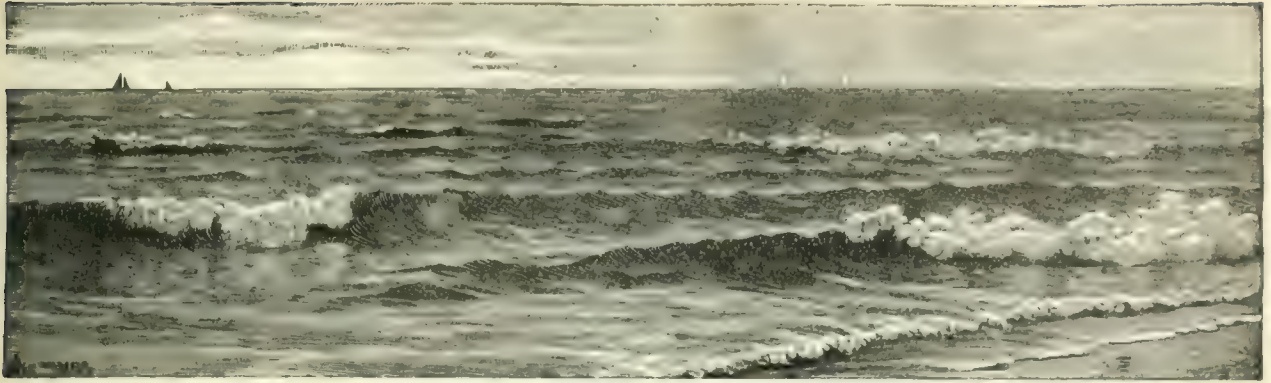
Point to the east side of the schoolroom. How do you know that it is the east side? Point to the west side of the room. How do you know it is the west side?

What did you walk upon as you came to school this morning? On what is the road

or the sidewalk? We walk on the ground, we build our houses on the ground, and the trees and the grass grow out of the ground. We sometimes call the ground *land*. In your walks about home you always find ground to walk on, and although you may come to a pond or a stream of water on which you cannot walk, you can generally see the land on the other side; so you are sure that you have not reached the end of the land.

If you were to start at your schoolhouse and travel on and on in any direction, do you suppose you would ever reach the end of the land? Let us see. Which way shall we go? Stand up and face the east side of the room. We will travel toward the east. We may have to start on foot, and perhaps we must go a little way across the fields, but before long we shall probably reach a road or a railway on which we may ride toward the east. We pass through town after town and through the open country, where we can see a long way over the fields to the *horizon*, or the place where the sky seems to meet the land in the distance. The land stretches out from us on all sides as far as we can see.

At last we catch glimpses of dark blue water far ahead. It seems to grow broader and wider as we go forward, and finally we reach its edge. It is a vast expanse of water, greater perhaps than any you have ever seen. The



The water extends away until it seems to meet the sky.

shore, or margin of the land, stretches off to the right and to the left as far as we can see; while the water extends away toward the east until it seems to meet the sky, on the distant horizon.

The surface of the water is usually heaving up and down in waves, which, one after another, seem to move swiftly toward the land. If the shore is a flat and sandy *beach*, these waves roll over and fall on it with a roar, in long lines of snow-white foam. If the shore is high and rocky, the waves dash wildly against the rocks with a louder roar, sending white spray high into the air.

We have actually reached the end of the land toward the east! The water before us is the *sea* or *ocean*. It is different from most streams and ponds, not only because we cannot see across it, but also because its water is so salt that it cannot be used for drinking.

The land which we walk on comes to an end at some distance to the east of our home, where it meets the sea or ocean.

The sea or ocean is a great body of water so wide that we cannot see across it.

The water of the sea is so salt that it cannot be used for drinking.

3. The Land Ends toward the West.

Which way did we travel in the last lesson? Stand with your back toward the east. In what direction are you facing?

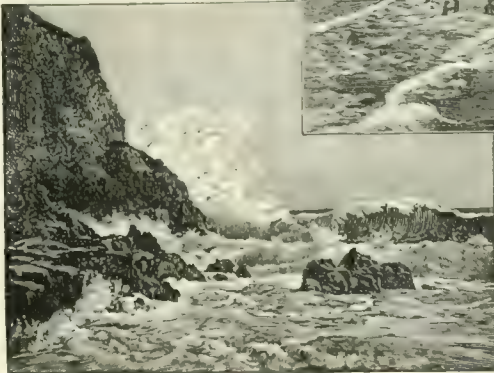
We will now travel from home toward the west, to see if the land ends in that direction. We can go most of the way

by railroad. At first we may travel over land that seems smooth and level. We pass through many towns, and sometimes we see houses in the country, but not so many as we found when journeying toward the east.

Presently the land before us becomes rough and hilly. The hills are so very high and steep that they are called *mountains*. Their bare and rocky tops seem to touch the clouds, and are often covered with snow even in summer. We cross these mountains only to



A flat and sandy beach.



A high and rocky shore.

find others, and for the rest of our journey we are seldom out of sight of mountains. By and by we reach the top of a mountain from which we can see blue water stretching out in front of us, seeming to meet the sky in the far-distant west.

We go down the mountain to the shore, which stretches out to the right and to the left as far as we can see. The great waves come rolling in and dash into white foam. If we taste the water we find that it is salt. We have reached the end of the land toward the west! The sea or ocean is again in front of us, but now the sea is west of the land, while before the sea was east of the land!

The land we live on is very wide, from east to west. It takes a railway train nearly six days and nights to cross from the ocean on the east to the ocean on the west.

At about noon to-day notice in which direction your shadow falls, and be able to tell about it to-morrow.

TOPICS FOR ORAL OR WRITTEN WORK.

(Answer in Sentences.)

- I. ENDING OF THE LAND. In what directions does the land end? What is the sea? What is the shore?
- II. SURFACE OF THE LAND. What two kinds of land did we travel over? What is a mountain?
- III. WIDTH OF THE LAND. How do you know the land is wide?

4. The Land Ends to the North and to the South.

Stand with your right hand toward the east and with your left hand toward the west. The direction in front of you is called *north*; and the direction behind you is called *south*. In what direction does your shadow fall at noon? At noon, how can you find the north? How can you find the north in the early morning or in the late afternoon?

If we journey from home toward the north, we may travel by railway at first: but soon

the railway ends. We then travel on foot or in a canoe or boat, for there are many streams and great ponds or lakes over which we may paddle. We shall be many weeks and perhaps months on the way. We must camp out at night, as there are no towns or farms, and but very few people; for our way lies through the wilderness of a great, lonely land.

At last we reach the end of the land, and the salt water of the sea is before us. Here, however, we are likely to find the sea full of great floating fields of ice, for in the far north the winters are so long and so cold that the ice becomes very thick,—so thick that it is not all melted during the short summer.

We have found that the land ends toward the east, toward the west, and toward the north. Point to the east; to the west; to the north; to the south. Let us see if the land ends also toward the south.

When we start from home we may travel

at first by rail, but after a while the railway ends, and we must go on foot or on horseback.

We pass through but few towns. The people look and dress and live much as we do at home, but we cannot understand them when they talk, for they speak a language different from ours.

For weeks we travel through dark, gloomy forests, where the trees stand so close together, and the tangled vines are so thick, that we cannot pass through until we have cut a path. In the forests we may see troops of long-tailed monkeys playing in the trees, and flocks of beautiful green, red, and yellow parrots flying about.

The weather is very warm, and if we were



The hills are so high that they are called mountains.



The sea is full of floating fields of ice.

to stay there all the year, we should find that there is no winter and that snow and ice are never seen except on the tops of the highest mountains.

At length we leave the forests behind and enter open country again. As we advance we notice that our shadows at noon fall toward the *south*, instead of toward the north as at home. We also notice that there is a winter season and a summer season, but that it is winter during the months when it is summer at home. Think of it: if we lived there, we should wear overcoats on the First of July and straw hats at Christmas!

We go forward and gradually reach a colder region, where the winters are long and the summers short, until at last we are stopped by a vast expanse of salt water. The sea is again before us! We have reached the end of the land toward the south!

TOPICS FOR ORAL OR WRITTEN WORK.

(Answer in Sentences.)

- I. DIRECTIONS. How can you find north? South? East? West? In what directions does the land end? Where have you found the sea?
- II. HEAT AND COLD. What kind of weather is there far north of your home? Where is a land that has no winter? When is there winter in the far south?

5. The Continent of America.

In what directions have we traveled? What has stopped each journey? Where, then, is the sea?

If we travel from home in *any* direction, we shall at last come to the sea, for the sea lies on all sides of the land.

Were we to follow the shore of the sea entirely around the land until we reached our starting place again, we should find that the shape of the land is something like the outline on the next page. The pic-



We cannot pass through until we have cut a path.

ture which you draw of a house or a tree is smaller than the thing itself. In the same way, this map of the land is much smaller than the land itself. The real land is so very large that it would take several years to walk all around its edge.

On this map the land is shaded, but the sea is white, so you can easily tell the one from the other. The directions are marked near the edges of the map. The east side of the land is the side toward the east side of the map, the west side of the land is the side toward the west side of the map, and so on. You see that most of the land is in one great mass, but that along its margin there are several smaller masses of land, each completely surrounded by water. The continuous mass of land is called a *continent*. It is the continent of America. The smaller masses of land surrounded by water are called *islands*. The continent and islands together are sometimes called simply America.

You will notice that the sea or ocean which surrounds the continent is one continuous body of water; but its different parts are called by different names. What is the name of the part of the sea east of America? What is the name of the part west of America? Of the part north of America?

Is the continent as wide in the middle as it is farther north or farther south? In the middle it looks like a mere strip or neck of land. At the narrowest part of this neck a man might walk across the continent in a single day from the Atlantic to the Pacific Ocean. A narrow neck of land connecting two larger masses of land is called an *isthmus*, which means "neck." Find the isthmus on the map. What is its name? The land is so narrow here that we may say the isthmus connects two *grand divisions* of the continent. One of these is called North America, the other South America. Why are they so called? We live in North America. Find North America on the map.



TOPICS FOR ORAL OR WRITTEN WORK.

(Answer in Sentences.)

- I. **THE MAP.** In what respect is the outline map like the land? Name one way in which it is different. Which is the east side of the map? The west side? The north and the south sides?
- II. **THE CONTINENT.** Name it. Name its grand divisions. By what oceans is it surrounded? How is it different from an island? What is an isthmus?

6. Across the Sea to the East.

What is a continent? In which continent do you live? In which grand division do we live? Which ocean east of North America?

To-day we will go to the east shore of North America and get on a great steamship in which we will sail out on the Atlantic Ocean. The steamship is built of steel, and there is room in it for more than a thousand people. It is driven through the water, by means of powerful engines, as fast as a freight train moves. We will sail toward the east.

As we move away, the land grows blue and misty in the distance, and finally sinks out of sight behind us. There is now nothing to be seen but the ship, the water all around us, and the sky overhead. We steam along, day and night; the sun seems to rise out of the water in front of us each morning, and to go down into the water behind us every evening.

Even when the weather is bright and pleasant, the waves of the sea are generally large enough to make the ship rise and fall and rock from side to side so that it is hard to keep our balance while walking about the ship. But when the storm winds blow, the waves rise high and toss the great ship about as if it were a cork. We must not go out on deck then, for the high waves sometimes dash over the ship, and we might be swept away and drowned. But after the winds die out and the waves subside, we may again go on deck.

All this time the engines have been driving our ship eastward. At last, about a week after starting, we can see land far ahead. As we draw near the land, it seems to rise out of the sea, and its shore extends far to the right hand and to the left. Finally our ship stops, and we go ashore. We have crossed the Atlantic



We will get on a great steamship.

Ocean and have reached another continent! This land, which we reach by sailing to the east, is called the Eastern Continent.



The high waves sometimes dash over the ship.

TOPICS FOR ORAL OR WRITTEN WORK.

(Tell about each Topic in Sentences.)

- I. THE STEAMSHIP. Its material. Its size. Its use. Its swiftness.
- II. THE JOURNEY. Starting place. Direction of journey. Time of journey. Stopping place.
- III. MID-OCEAN. By what the ship is surrounded. Where the sun seems to rise and to set.

7. The Eastern Continent.

How many continents have we learned about? What ocean between them? How long does it take to cross from one continent to the other? On which continent do you live? What is the other continent called?

The shape of the Eastern Continent is something like this outline.

Are most of the islands near this continent directly east of it? Are they directly south? The direction halfway between south and east is called *southeast*; that between south and west is *southwest*. What is the direction between north and west called? Between north and east? In what direction from the Eastern Continent are most of the islands?

tralia is generally called a continent. Why?

Compare the map of America with the map of the Eastern Continent. Which of these continents is the larger? It is nearly twice as large as America. Name the three continents in the order of their size.





TOPICS FOR ORAL OR WRITTEN WORK.

(Answer in Sentences.)

- I. CONTINENTS. What is a continent? How many have you studied? Name them.
- II. GRAND DIVISIONS. Name the grand divisions of each continent.
- III. OCEANS. What is an ocean? Name those that you have studied.

8. Our Interest in the Eastern Continent.

Although the Eastern Continent is separated from our land by the wide ocean, which some of us may never cross, still there are at least two good reasons why we should learn about it.

In the first place, many of the things in common use come to us from that far-away land. Much of our tea and rice, and nearly all of

What is the name of the ocean north of the Eastern Continent? Which ocean is east of it? Which ocean is south? Which ocean is west?

In what direction did we cross the Atlantic to reach the Eastern Continent? The dotted line on the map shows where we approached the continent and landed. In what direction is America from the Eastern Continent? If we call this the *Eastern* Continent, what may we call America?

Like America, the Eastern Continent is nearly separated into two parts by the ocean. Only a narrow neck of land joins the two parts. What is such a neck of land called? What is the name of the neck which joins the two grand divisions of the Eastern Continent?

What is the name of the grand division southwest of the Isthmus of Suez? The other grand division may be called Eurasia, but the western part of it is often spoken of as the grand division of Europe, while the eastern and larger part of it is spoken of as the grand division of Asia.

our pepper and other spices come from Asia. The linen of which your handkerchief is made, and much of the woollen, and most of the silk, of which your clothes are made, come from Europe. Most of the white metal, tin, which forms the outside coating of our tinware, comes from Australia and the islands southeast of Asia. These and hundreds of other useful things are brought to us across the ocean.

But the Eastern Continent is even more interesting for another reason. It is our old home! Perhaps we ourselves never lived there, but our ancestors, that is, our parents, or our grandparents, or our great-grandparents, once lived in Europe; for many years ago all the white people of the world lived in Europe, southwestern Asia, and northern Africa, and most of the white people in the world still live there. So we call the central and northwestern parts of the Eastern Continent the home of the white people or "*Caucasian*" race.

The part of Europe that is of greatest interest to Canadians is the group of islands where we landed after our journey across the ocean,

as shown by the dotted line on the map. These are the British Isles, the centre of the great Empire to which Canada belongs. Here is London, the capital of the British Empire, and the largest and richest city in the world. In the city you may see the Houses of Parliament where the laws are made. At a little distance outside of the city is Windsor Castle, the home of the King. Many other lands of the Eastern Continent are parts of the British Empire. Two of the most important are India, a large country north of the Indian Ocean, and Australia, a large island east of it. Find these on the map.

The greater number of Canadians are descendants of people who left their homes in the British Isles. Many others are of French origin, that is to say their forefathers came from France. This is a country on the mainland of Europe, just south of the British Isles.

One of the first white men to find the way to America was Christopher Columbus. He sailed from Spain, the country south of France. Much of the southern part of the American continent is occupied by descendants of Spanish people.

The English and the French also took possession of large tracts in North America. The English settlements extended along the Atlantic coast, while the French were the discoverers and first white settlers of Canada. Read about this in your Canadian History and how the *Indians* were civilized.

TOPICS FOR ORAL OR WRITTEN WORK.

(Answer in Sentences.)

- I. THE EASTERN CONTINENT. Why is it useful to us? Why is it interesting?
- II. WHITE MEN IN AMERICA. Where is the home of the white race? Why are you interested in this race? Why are England, France, and Spain especially interesting to us?

9. Homes of the Races of Mankind.

Where is the home of the Caucasian race? Have you ever seen any negroes? Chinamen? Indians?

How does the color of negroes differ from that of white men? How does their hair differ? Negroes usually have broader and flatter noses, and thicker lips, than white men.

The ancestors of every negro in this country came from Africa, for Africa is the home of the *black* or *negro* race, and most of the negroes in the world still live in that grand division. Find Africa on the map. In what part of the Eastern Continent is it?

Negroes have been living in this country so long that those we see here have learned to speak and dress and live much as the white men do; but the first negroes who were brought to Amer-

ica were ignorant savages, and many of the negroes in Africa are still savages. They live in rude huts made of mud and grass, and wear little or no clothing.

There is another kind of people that we sometimes see in this country. They have yellowish skin,



and slanting, almond-shaped eyes, and each of them wears his hair in a long braid. They dress in a manner that seems odd to us, wearing loose jackets and queer shoes, and many of those living here are laundrymen. What are these people called?

The Chinese belong to the *yellow* or *Mongolian* race.

The home of this race is in eastern and northern

clothing, and passed their time in hunting or fighting with bows and arrows. The white men called them Indians.

There are now many more white people than Indians in America, but as the Indians used to be the only inhabitants, and as all the red men in the world still live on this continent, America is said to be the home of the *red* or *Indian* race.

TOPICS FOR ORAL OR WRITTEN WORK.

(Answer in Sentences.)

- I. RACES OF MANKIND. How many races are there? Describe the appearance of one race. Where is the home of each?
- II. RACES IN AMERICA. Name and describe the first race that lived here. The second. What other kinds of men have you seen?

10. Our Journey Eastward Completed.

Look at the map on p. 12. In what direction from home did we travel to reach our landing place in Europe? Let us continue our journey to the east across the Eastern Continent.

Asia. Though but few of them live in our country, there are about as many yellow people in the world as there are white people.

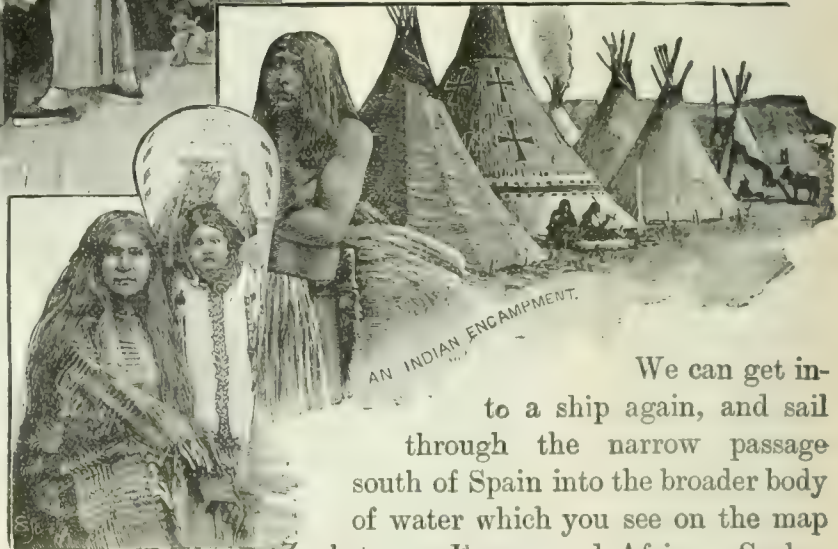
The people that live in the extreme southeast of Asia and in the neighboring islands are somewhat different from the yellow race; their eyes do not slant, and their skin is of a brownish color. They are called Malays. The great islands southeast of Asia are the home of the *brown* or *Malay* race.

When the white men first came to this country, the only people they found here had long, coarse black hair, and reddish-yellow skin. Most of them lived in huts or wigwags made of skins or bark. They wore little

narrow passage of water is called a *strait* or *channel*.

The broad body of water is called the *Mediterranean* Sea, which means a sea "in the midst of the land." Why is it so called?

How long did it take our steamer to cross



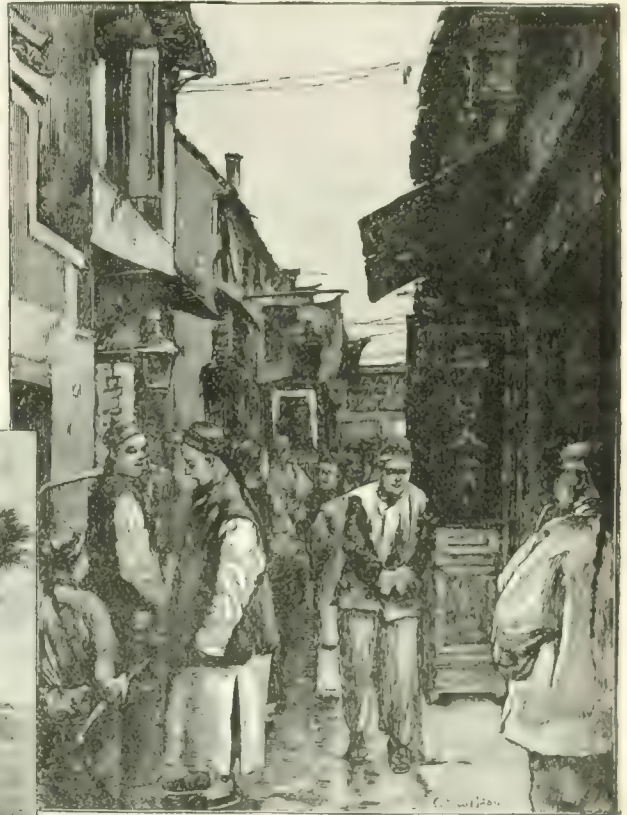
the Atlantic? The Mediterranean Sea is about two-thirds as long as the Atlantic Ocean is wide. About how long, then, will it take our steamship to reach the Isthmus of Suez? We will leave the ship there.

Near the Isthmus of Suez are many of the places told about in the Bible. At the African end of the isthmus is the "Land of Egypt." Near by in Asia is the place where Joseph was sold by his brethren, and not far away are the places where Jesus lived.

But we must push onward to the east, for it will take us many months to cross Asia to the shore of the Pacific Ocean. We must travel on camels or on horses, and we shall not see many wagons or carts, for there are few good roads. The people dress in strange fashions; they have curious manners, and speak in languages that we do not understand. Much

for this is the home of the yellow race. They are all busy, but nearly all of them are very poor. We pass through many large towns and cities, where most of the houses are only one or two stories high, and where there are few horses, carts, or wagons in the narrow and crowded streets.

At length we reach the end of the land, and



In the narrow and crowded streets.



In the "Land of Egypt."

of our way lies over sandy or rocky deserts. Then we climb over mountains so high that their tops are above the clouds.

After a time we descend into lowlands where there are very many people. We cannot understand what they say, but we see that each man wears a braid and has yellow skin and slanting eyes like our laundryman at home. What people are they? But there are so many of them! The land is fairly alive with yellow people;

the ocean once again extends far out to the eastward before us. What is the name of this ocean? Here we find steamships with white men on them, and we sail away from the shore.

We gradually lose sight of the land, and day after day we sail onward, always to the east, with nothing in sight but sky and water. Probably we begin to doubt if there is any land ahead of us, for we have been sailing more than twice as long as it took to cross the Atlantic.

At last, however, land appears before us, stretching far off to the right hand and to the left. Our voyage is ended; we have crossed the Pacific Ocean and have reached the western shore of another continent.

The shape of the continent is like this:

Can you tell its name?

From what land did we start when we crossed the Atlantic Ocean? In what direction did we go? What land did we reach? When we continued our journey, did we change the general direction in which we traveled? What land did we reach at last? From what shore of America did we start? What shore did we reach? Can you explain this?



11. Our Journey Teaches the Shape of the Earth.

Stick a pin into a large, round apple, as in the picture below. With a pencil scratch a line around the apple, moving the pencil always in the same direction. What point on the apple do you finally reach? In your journey constantly to the east from your home, what point do you finally reach?

The continent of America, on which we live, the Eastern Continent, and the oceans on which we have traveled, form parts of the surface of a great ball, which we call the *earth*. In our long journey eastward, over sea and over land, we traveled around this ball until we came again to the land from which we started.

Pretend that your apple is the round earth and that the pin in it is the place where you live. Scratch several journeys round the apple from your home, each in a different direction. What place do you

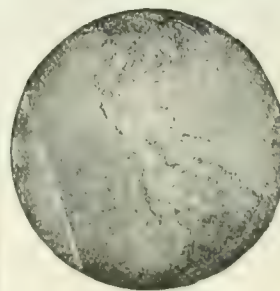
always reach? If you should journey on the earth in any direction from your home, and continue without turning to the right or to the left, what place would you finally reach? Why?

The earth seems to us flat instead of round, because it is so large, and we are so close to it, that we can see but a small part of it.

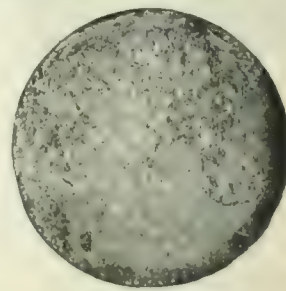
From a great height in the sky we might see that the earth is round, and it would look something like one of the pictures below. Each picture shows one

half of the earth, while the picture beside it shows the other half. A perfectly round body is called a *sphere*. *Hemisphere* means "half a sphere," and as the earth is nearly a sphere, a map or picture of half the earth is called a map or picture of a hemisphere.

Look at the two pictures below. You see that the continent of America stretches across one side of the round earth. This half of the earth is called the Western Hemisphere. The Eastern and the Australian continents are on the opposite side of the earth. That half of the earth is called the Eastern Hemisphere.

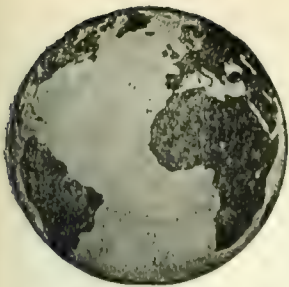


Western Hemisphere.

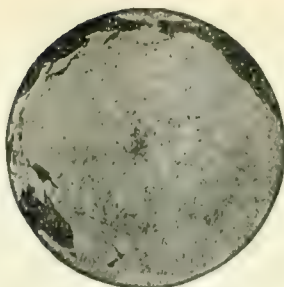


Eastern Hemisphere.

In the first two pictures on the next page you see the Atlantic Ocean stretching across one side of the earth, and the Pacific Ocean covering almost all of the opposite side.

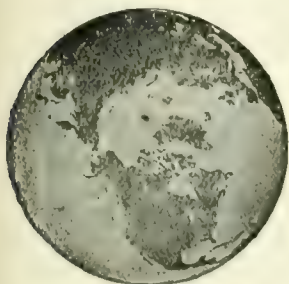


Atlantic Ocean.

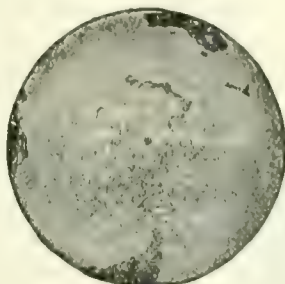


Pacific Ocean.

The two pictures below show the Northern Hemisphere from above the most northern point of the earth, and the Southern Hemisphere from above the most southern point. You see that about half of the Northern Hemisphere is land, but that almost all of the Southern Hemisphere is covered with water. The ocean about the most southern part of the earth is called the Antarctic Ocean.



Northern Hemisphere.



Southern Hemisphere.

Is most of the earth's surface land or water? About three-fourths of the earth's surface is water; only about one-fourth is land.

TOPICS FOR ORAL OR WRITTEN WORK.

(Answer in Sentences.)

- I. THE EARTH. What is its shape? Why do you think so? How much of its surface is land, and how much water?
- II. THE LAND. Name the continents. In which hemisphere is each?
- III. THE WATER. Name the five oceans. Tell where each ocean is.

12. The Turning of the Earth.

The great ball on which we live is always turning slowly around toward the east. This

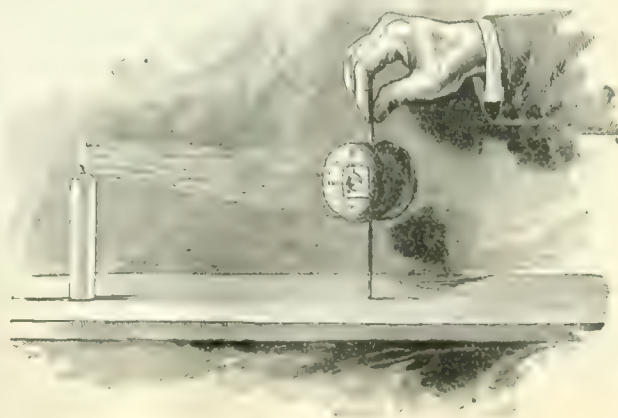
motion of the earth makes the sun *appear* to rise in the morning, to move westward across the sky during the day, and to set in the evening. It is really the earth that moves.

The turning of the earth once around in front of the sun makes day and night. We divide this time into twenty-four hours.

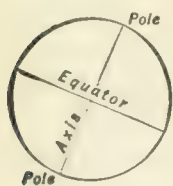
Get an apple and pretend it is the round earth. Pin a postage stamp near the middle of one side for America, and a larger piece of paper on the other side for Asia. Stick a straight wire or hat pin through the centre of the apple from the stem, and hold it in front of the candle on the teacher's desk, as in the picture below. We will pretend that the candle is the sun. Now, twirl the pin so as to make the apple *turn slowly*. See how America and Asia are brought by this turning, first into the light, or day, and then into the shadow, or night, and then into the light again.

When it is day in America it is night in Asia. In about twelve hours, however, the earth will turn so far that Asia will be toward the sun, and America away from it. Will it then be day or night in Asia? In America?

Imagine a line passing through the centre of the earth, from one side to the other, around which all parts of the earth move as it turns. We call this imaginary line the earth's *axis*. One end of the axis is at the most northern point of the earth, and is called the *north*



pole. The other end of the axis is at the most southern point, and is called the *south pole*.



Imagine a line passing around the earth just halfway between the poles. This line divides the earth into a northern and a southern hemisphere, and is called the *equator*. The equator extends exactly east and west.

tor extends exactly east and west.

TOPICS FOR ORAL OR WRITTEN WORK.

(Tell about each Topic in Sentences.)

- I. **THE MOTION OF THE EARTH.** The direction in which it moves. The time which it takes to turn once. The divisions we make of that time.
- II. **THE RESULT OF THE EARTH'S MOTION.** Apparent. Real.
- III. **LINES AND POINTS.** The axis. The north pole. The south pole. The equator.

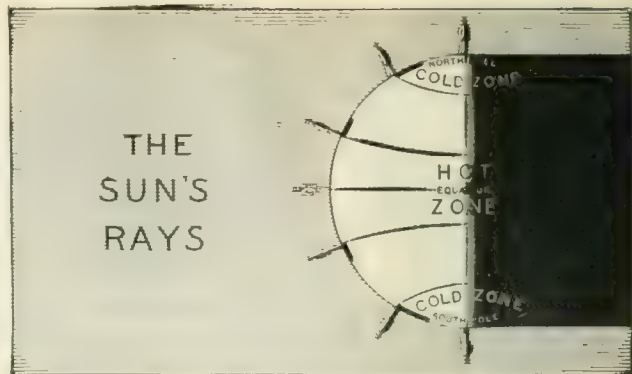
13. The Zones.

Why is it day with us during part of the time only? What, then, do we get from the sun? Is it generally warmer in the daytime or at night? Why? What, then, besides light do we get from the sun? Without the heat from the sun we should all freeze to death.

What part of the day is the hottest? Is the sun low down or high up in the sky during the middle of the day? Does the sun give us more heat when it is high up in the sky and nearly overhead, or when it is low down in the sky, as in the early morning and late afternoon?



Life in the frigid zone.



The sun's rays in the different zones.

is enough rain the trees and grass are always green. This belt is called the *hot* or *torrid zone*. Its width is about one fourth the distance on the earth's surface between the north pole and the south pole.

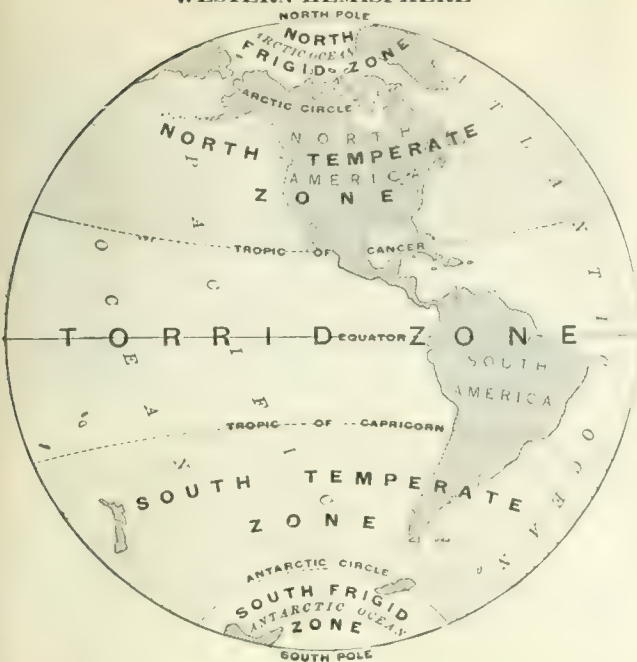
To which two men in the picture does the sun seem low down in the sky? In the parts of the earth near the poles the sun is never high in the sky, and in winter, in much of those regions, it does not rise at all for several weeks. In midsummer it does not set, but seems to circle around the sky just above the horizon. The winter is so long and cold, and the summer is so short, that no trees grow tall, and only a few kinds of plants live there. Those parts are called the *cold* or *frigid*



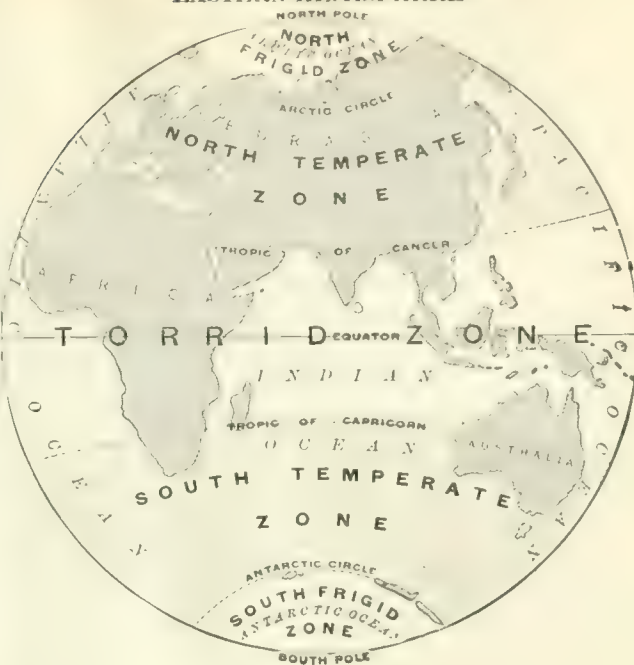
Life in the torrid zone.

Look at the picture at the top of the next column; to which man does the sun seem to shine from directly overhead? On what part of the earth is that man standing? There is a broad *zone* or belt, midway between the poles, in some part of which the sun is always overhead at noon. In that zone the days and nights are each about twelve hours long; the weather is warm all the year; and where there

WESTERN HEMISPHERE



EASTERN HEMISPHERE



zones. There is a north frigid zone around the north pole, and a south frigid zone around the south pole.

Between the hot and the cold zones the sun is never quite overhead, and the weather is neither so hot in summer as in the torrid zone, nor so cold in winter as in the frigid zone. There are two of these belts. One is called the *north temperate zone*; the other, the *south temperate zone*. Each of them is nearly as wide as the torrid zone.

In which zone is the sun always nearly overhead at noon? In which zones do shadows fall toward the north at noon? Can you tell why? In which zones do shadows fall toward the south at noon? Can you tell why?

In the temperate zones, spring, summer, autumn, and winter follow one after the other; but when it is winter in the north temperate zone, it is summer in the south temperate zone. In which season do most of the trees and plants begin to grow and put forth leaves and flowers? In which are they covered with leaves and fruit? When do they shed their leaves?

When do they seem dead and bare? We live in the north temperate zone. When the trees are covered with fruit near our home, how do the trees look in the south temperate zone?

In summer the days are longer than the nights in the temperate and frigid zones, but in winter they are shorter. The nearer to the poles we get, the longer we find the days of summer and the nights of winter; until finally, at the poles themselves, we should find that daylight lasts all summer, and the darkness of night lasts nearly all winter.

What zone lies around the north pole? Around the south pole? Through which zone does the equator pass? Where is the north temperate zone? The south temperate zone? Name the five zones in order, beginning at the north.

What is the name of the line at the edge of the north frigid zone? Of the south frigid zone? At the north edge of the torrid zone? At the southern edge? Name these lines in order, beginning at the north.

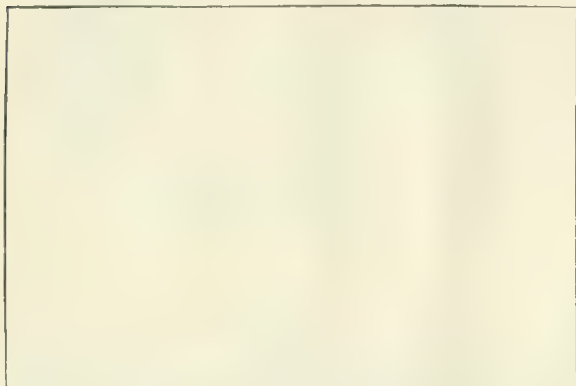
TOPICS FOR ORAL OR WRITTEN WORK.

(Tell about each Topic in Sentences.)

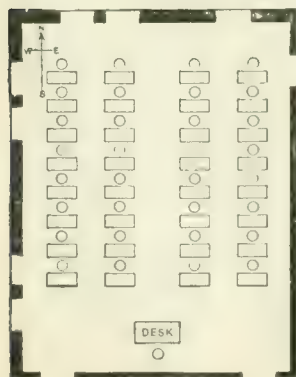
- I. ZONES. What a zone is. Where each zone is.
- II. LENGTH OF DAY AND NIGHT. In the torrid zone. In the frigid zones. In the temperate zones.
- III. HEAT. Where heat comes from. Where the sun is when it gives us the most heat. Why the torrid zone is hot. Why the frigid zone is cold.

14. Map Reading.

Here is a drawing, or plan, of the floor of a room which is 24 feet long and 16 feet wide.



The right side of the plan represents the east side of the floor. The plan is just like the floor in shape, but much smaller. How many inches long is the plan? How many feet long is the floor? If 3 inches in the plan stands for 24 feet in the floor, what does 1 inch in the plan stand for? See if 1 inch in the width of the plan stands for 8 feet in the width of the floor. The plan is said to be drawn on a scale of 1 inch to every 8 feet.



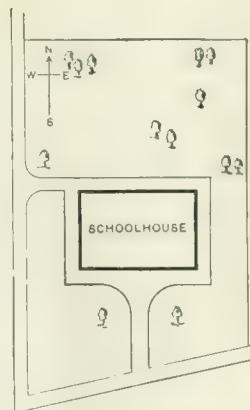
Plan of a schoolroom.

On the same scale, draw the floor plan of another room which is only half as large as the first; that is, 12 feet one way and 16 feet the other way. If you draw this plan correctly, you will find that it is just half as

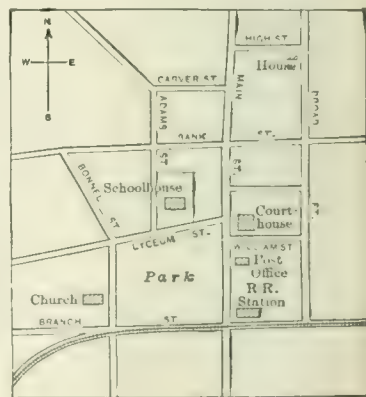
large as the first. If the plans are drawn on the same scale, you can tell by comparing them just how much larger one room is than the other; and if you know the scale on which the plan is drawn, you can tell from it the real size of the room.

Which is the east side of your schoolroom? How many feet long is the room? How many feet wide is it? Draw a plan of your schoolroom floor, making the right side of your plan represent the east side of the floor. Your teacher will help you to draw it to a scale. Show upon your plan the location of the doors, windows, desks, and other objects in your schoolroom.

How long is your school yard? How wide is it? In what part of it is the schoolhouse? Make a plan, or map, of the yard; show the location of the gate and of the schoolhouse.



Map of a school yard



Map of a town.

In what direction does your schoolhouse front? On what street is it? In what direction does the street extend?

On what street is your home? In what direction is it from the schoolhouse? Make a map showing the location of the schoolhouse and of your home.

The pupils may help the teacher to make upon the blackboard a map showing the principal streets and buildings of the town. Each pupil may try to make such a map himself. Write the names of the different places on the map. Show on it which direction is east.



Two slopes which meet at their lower edges.

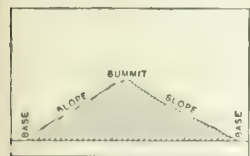
15. Field Work.

Arrangements should be made, whenever possible, to give the class the great benefit of lessons in the field.

Is the land about your schoolhouse level or sloping? In what direction does the land slope? Are the slopes gradual or steep? Are they called *hills*?

Point to the top, or *summit*, of a hill. Point to the foot, or *base*, of a hill. The sides of a hill are called its *slopes*. Sometimes there are two slopes, one on each side. Are the slopes just alike? Which is the longer? Which is the steeper? Are all the hills you have seen just alike?

Make in sand or clay a model of the hill



Profile or section of a hill.

which you have just been studying. Draw on the blackboard a *profile* or *section* of the hill, as in the picture, showing how steep the slopes are and which one is the longer. Write a description of the hill which you modeled.

What becomes of rain water that falls on the land? How far down a slope will water run? What stops it? Above is a picture of two slopes which meet at their lower edges, forming a *valley*. Where the slopes meet thus we often find a *stream*. Examine a stream in your neighborhood. What is a stream? Is the stream straight or winding? Is it clear or

muddy? What makes a stream muddy? Is this stream in a valley? How many slopes has the valley? Are all the streams that you have seen, in valleys? Model a valley in which a stream flows.

Examine the shore of a pond or lake. Some shores are steep and rocky; others are low and level. At some places on the *coast* or shore of the ocean the waves dash against the land, breaking off great pieces of rock and rolling them about until they are worn into sand, which is carried away by waves and currents. At other places the waves wash up the sand and spread it as a smooth and gently-sloping beach. So the edge of the land is constantly changing its shape, and is generally crooked.

How can you find the directions north, south, east, and west? It is also possible to find these directions at night by means of the stars. On a clear night, you may see a group of seven stars, as in the picture below. What does the shape of the group remind you of? The group of stars is called the Dipper. If you follow onward with your eye the line of the front side of the Dipper, you will see another bright star. This is called the North Star. *The earth's axis always points toward it.* The direction on the earth toward this star is north.



The group of stars is called the Dipper.

We may also find the north by means of a wonderful instrument called the *compass*. It is a little bar of magnetized steel balanced on a sharp point about which it can turn freely. When disturbed, this bar or needle swings to and fro, but always settles to rest with one of its ends pointing very nearly toward the north pole.

When suitably mounted in a glass-covered box, this instrument is called the *mariner's compass*, because it is always used by mariners or sailors in guiding ships over the trackless ocean.



Mariner's compass.

MAP OF THE WORLD.

As the earth is a globe, it is impossible to show accurately on a flat surface the whole outside of it in one view.

It is important, however, to have a general view of the earth's surface at one time, in order to show the relative positions of places, their true direction from one another, the belts of heat or cold in which they lie, and many other things. The most convenient arrangement for this purpose is that of the map of the world given on page 23.

This Mercator map does not give the true proportions as to size, and we notice this especially in the great land masses in the north. In many other ways, however, the advantages of the Mercator map more than make up for this defect. *The British Empire, to which we belong, is shown in red color.*

What continent is shown in the centre of this map? What are its two grand divisions? In which of these is our own country? What ocean is east of North America? What continent is beyond this ocean? Name its grand divisions. What ocean is west of our continent? What continents lie beyond this ocean? What ocean is west of Australia?

What grand division extends farthest south? In what cape does it end? Which extends farther south, Australia or Africa? What noted cape is at the southern end of Africa? Find Bering Strait. What continents does it separate? What strait is between Europe and Africa? Asia and Africa? See map of Asia or Africa. Find the Suez Canal.

Find the great seaport of London. A seaport is a city or town to and from which sea-going vessels sail. Find New York. These two cities are the world's greatest centres of commerce. Tell on what waters and in what directions a steamer would sail on the following voyages: From London to Montreal for a cargo of flour and meat. From New York to Havana for sugar. To Para for rubber. To Manila

by way of Cape Town for hemp. From London to Calcutta by way of Cape Horn. From Vancouver to Melbourne. From Liverpool to New Orleans for a cargo of cotton. *Other voyages may be suggested by the teacher.*

Find the equator. In what latitude are all places north of the equator? South? Between what degrees of latitude are most of the large cities of the world? What city of Asia has about the same latitude as New Orleans? What cities of Africa? What cities are south of the 30th degree of south latitude? In what latitude are the West Indies? See page 165.

Find New Zealand, Jamaica, British Guiana, India, Tasmania, and the Falkland Islands. Point out Quebec, Gibraltar, Aden, and Singapore. Name the waterways commanded by each. Where are the British Isles, Newfoundland, Vancouver, and Japan? Find Malta, Trinidad, and Ceylon. Locate the Baltic Sea, Hudson Bay, and the Sea of Okhotsk. Find the Arabian Sea, Gulf of Mexico, and the Bay of Bengal. Turn the book round so that the south of the map will be the top. Which half of the world has most water? Which has most land? Find Cuba and Madagascar. Point out Paris, Berlin and Tokio. Where are the Cape of Good Hope, North Cape, Cape Horn, and Cape Farewell? Notice the position of North America upon the earth's surface. What grand division can be reached by sailing east from



Dry Dock, Esquimaux.

North America? By sailing west? What oceans would be crossed? In what direction would we sail to reach Australia? On what ocean? What is the most southern land called? What is the most northern land called? In what ocean is it situated? What sea is between North and South America? What sea between Europe and Africa? What sea between Asia and Africa? What is the southern point of Africa called? What is the southern point of Ceylon called? What islands lie to the east of Asia in the temperate zone? What part of America is nearest to Japan? Where are the Sandwich Islands? In what direction from San Francisco are they? Point out the Sea of Japan, the China Sea, and Iceland.

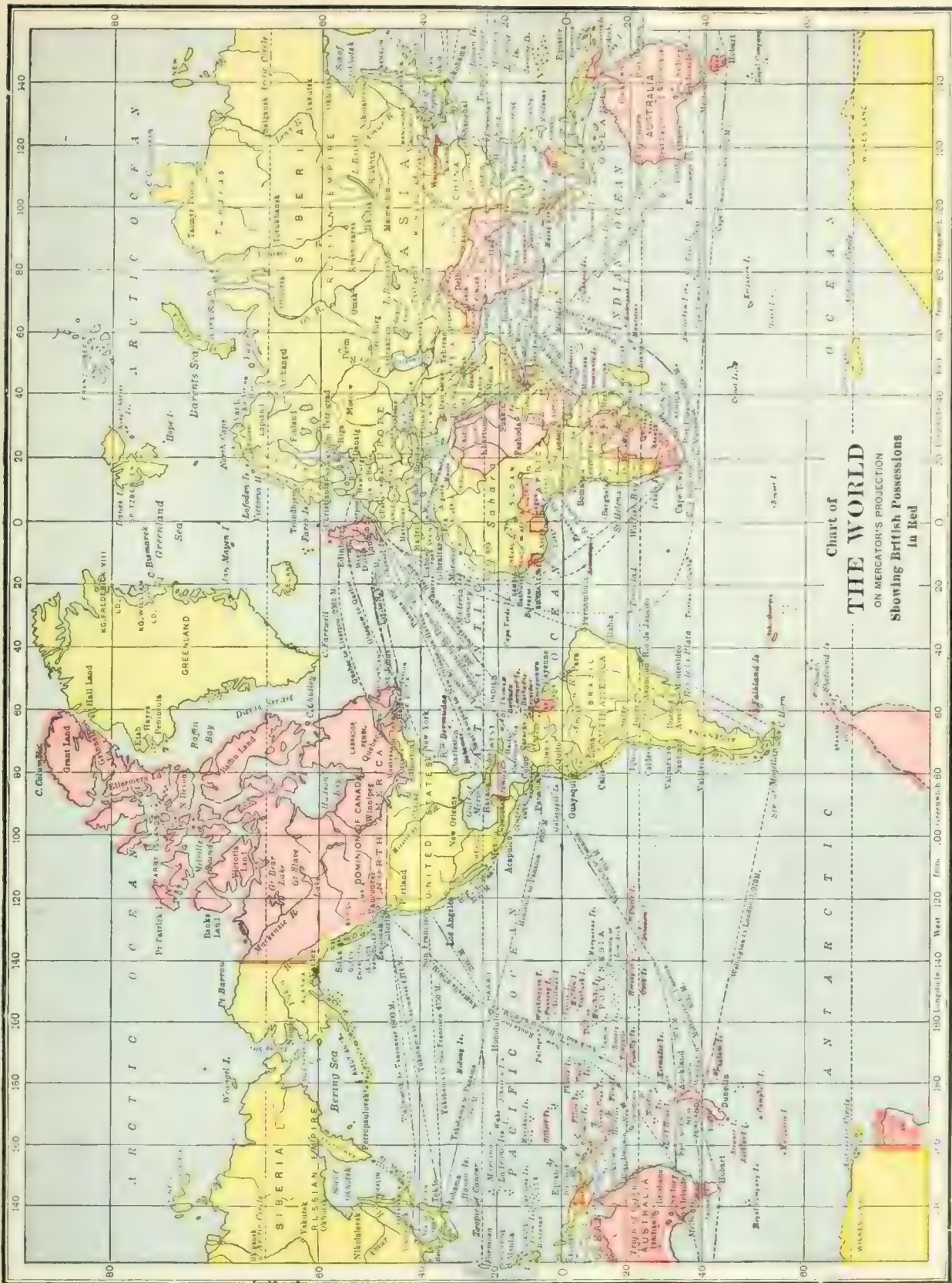


Chart of
THE WORLD
ON MERCATOR'S PROJECTION
Showing British Possessions
in Red



NORTH AMERICA. (Same scale as the maps of South America, Eurasia, Africa, and Australia.)

In some parts of North America there are plains that lie but a short distance above the level of the sea. These plains are called *lowlands*. There are also plains that lie far above the level of the sea. These plains are called *plateaus*. From these high plains the mountains often rise still higher, and the elevated regions,

whether mountains or plateaus, are called *highlands*. Look at the relief map of North America. Notice that some parts are darker in shade than others. This difference in shade is to show the difference in the *altitude* of the land, or its height above the sea level. The darker in shade, the greater the altitude of the land.

NORTH AMERICA.

16. Position and Shape.

In what continent do we live? In what grand division of that continent? In a former lesson we studied a map of North and South America together; a larger map of North America by itself is shown on the opposite page.

What circle crosses the northern part of North America? What tropic crosses the southern part? Is North America, then, north or south of the equator? In what zones is it?

What ocean is north of North America? East? South and west? With what land is North America connected on the southeast? How? What land is shown in the northwest corner of the map? What strait separates North America from Asia? What is a strait?

If you should sail west from North America across the Pacific, what continent would you reach? Which side of it? If you should sail east from North America across the Atlantic, what continent would you reach? On which side of it would you land?

How many sides has North America? Which side is longest? Which of the other two sides is the longer? Where is North America widest?

Is the coast line on any side of North America a straight line? Point to a place where the shore bends inward so far that a part of the water is almost shut in by the land. A body of water extending into the land from a larger body of water is called a *gulf*, *bay*, or *sea*.

What large bay in the northern part of

North America? What strait connects it with the Atlantic Ocean? The strait and the bay were named after Captain Henry Hudson, who was one of the first white men to sail into them. While in this bay, his crew sailed away with the ship, and left Hudson and his son in a little boat to die from cold and hunger.

What strait and bay west of Greenland? Great blocks of ice, called *icebergs*, larger than the largest house, and vast fields of ice can be

seen floating in these waters. Seals, walruses, and other animals that live in cold water often climb out upon the floating ice, and great white or polar bears sometimes swim to the ice to catch and eat these animals.

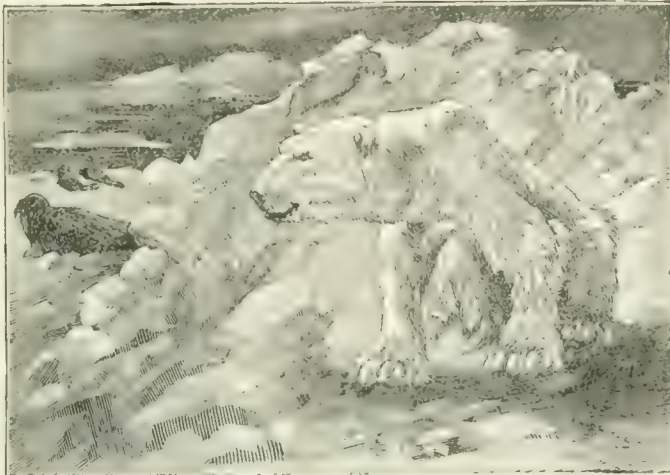
What gulf is in the extreme east of North America? The part of the ocean near the Gulf of St.

Lawrence is one of the best places in the world for catching codfish and mackerel.

What large gulf is in the southern part of North America? What sea is north of the Isthmus of Panama? What long, narrow gulf is on the west coast of North America?

What sea is in the northwest, between North America and Asia? Most of the seals whose fur is made into sealskin muffs and jackets are killed in this sea. What strait connects this sea with the Arctic Ocean? What is a gulf, bay, or sea?

Find a place just south of the Gulf of St. Lawrence where a part of the mainland of



Polar bears swim to the ice.

North America extends out into the Atlantic Ocean so as to be nearly surrounded by water. A portion of land thus extending from a larger body of land and nearly surrounded by water is called a *peninsula*, which means "almost an island." What is the name of this peninsula? The Acadians, about whom Longfellow wrote in the beautiful poem "Evangeline," lived in Nova Scotia.

What peninsula is between the Gulf of Mexico and the Atlantic Ocean? What peninsula is southeast of the Gulf of Mexico? What long, narrow peninsula is in the southwest of North America?



Draw an outline map of North America like the small one here given, but larger and without the islands. Compare it with this one, and find your errors. Practice sketching this map on the blackboard and on paper until you can draw in two minutes a good outline of North America.

17. Islands.

On which side of North America are most of the islands? Name the largest island north of North America. What island is east of Greenland? In what zones is Greenland? Most of this island is always deeply buried under snow. The first white men to visit it were sailors from Iceland. They found a little grass-covered slope, which they called Greenland; then this name was given to the whole island. Do you think the name suits it?

What island is east of the broadest part of North America? This island was visited by English sailors a few years after Columbus came to America. Icebergs from Greenland

are often seen floating in the ocean as far south as Newfoundland.

What islands are east of the Gulf of Mexico? Columbus was the first white man who visited these islands. Until the time of Columbus few people believed the earth to be round, and no one knew of any Western Continent. When people went to Asia from Europe they traveled eastward, as we did in crossing the Eastern Continent. Columbus was sure that he could reach Asia quicker by sailing westward around the earth. When he landed on these islands he thought he had reached the Indies in Asia, so he called the people Indians, and afterwards the islands were called the West Indies. In what zone are most of these islands?

What island is near the middle of the west coast of North America?

TOPICS FOR ORAL OR WRITTEN WORK.

- I. LOCATION OF NORTH AMERICA. Zones. Bordering oceans.
- II. SHAPE. General shape. Comparison of three coast lines in length. Description of one coast line: general direction; indentations; projections; islands.

18. Mountains.

The map on p. 24 shows by the smooth and even shading where the surface of the land is smoothest and flattest, and by the broken and irregular shading where the surface is most broken into steep slopes.

In which part of North America does the surface seem most uneven? The whole western part of North America is broken by mountains.

Are the slopes of the hills which you have seen gentle, or steep? Are those hills as high as a church spire? Are they as high as the clouds? Some hills are so high that their tops are often hidden in the clouds. Such hills are always called *mountains*. But a mountain need not be as high as the clouds, for any hill that is quite steep and much higher than the surrounding country is likely to be called a mountain. Very many of the mountains in the western part of North America are so high.



Map Studies.—Look at the map above. Name and locate the capital of Canada. What two cities are on the St. Lawrence? What city is in Nova Scotia? What three cities are in southern Canada west of the Great Lakes? Notice what circle crosses the northern part of Canada.

What very large island is northeast of North America? By what waters is Greenland surrounded? What circle crosses Greenland? In what zone is the greater part of Greenland? What island is east of Greenland? What oceans

surround Iceland? What should you suppose the climate of these islands to be?

On which side of the Rocky Mountains are there vast plains? Name the largest river flowing into the Gulf of Mexico. What highlands are on the east and west sides of the Mississippi basin? Which part of the central plain is drained by the Mississippi river and its branches?

What river forms the outlet of the Great Lakes?

Sketch the general outline of North America, using only three straight lines.



The Rocky Mountains.

that their rocky tops are frequently hidden by the clouds.

Some hills stand by themselves and are surrounded, on all sides, by low land. In what directions does the ground slope away from the top of such a hill? More often, however, hills extend in long lines with slopes on but two sides, like the ridge of a roof. Such a line of hills is called a *ridge* or a *range*; and a number of neighboring ranges, extending in about

the same direction, form a *chain* of hills or mountains.

In what direction do most of the ranges in western North America extend? What is the name of the longest mountain chain? These mountains extend nearly the whole length of North America. In the north they are always covered with snow, and even near their southern end, in the torrid zone, some of the higher points, or *peaks*, are snow-covered throughout the year; for the higher we go, the colder we find the air to be, so that even in the torrid zone, if the land is high enough, we find ice and snow.

What two long ranges are west of the Rocky Mountains? Between these ranges, and the Rocky Mountains is a broad *highland*. It is crossed by short mountain ranges and deep narrow gorges, or *canyons*. This highland, with the mountain ranges on its borders, is much higher than any other part of North America, and is often called the *Rocky Mountain highland*.

Where this highland is widest, what part of the width of North America does it occupy?

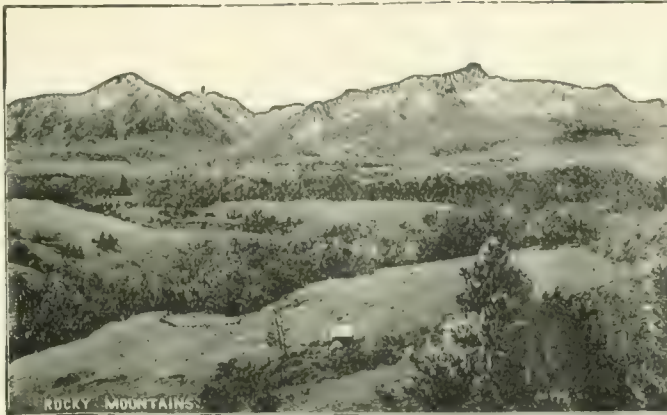


Such a line of hills is called a ridge or a range.

Where does it cover almost the whole width of the continent?

What other mountains in North America? Near what ocean are they? Between what two gulfs and in what direction do they extend?

Which look higher and more rugged on the map—the Rocky Mountains, or the Appalachian? The Appalachian Mountains are much the lower. Their highest summits are scarcely as high as the flat country at the foot of the Rocky Mountains. They are not high enough to be covered with snow all the year, and few are so high and rocky that trees and grass cannot grow on their very tops. Thus the Appalachian Mountains, with their smooth, flat tops covered with trees, look very different from the higher mountains of the West, which are covered with trees only part way up their slopes, while their pointed and uneven tops, when not covered with snow or hidden by the clouds, are seen to be rugged crags of naked rock.



TOPICS FOR ORAL OR WRITTEN WORK.

- I. MOUNTAINS. A mountain. A mountain range. A mountain chain.
- II. ROCKY MOUNTAIN HIGHLAND. Its location. Its direction. Its greatest width. Its borders.
- III. APPALACHIAN MOUNTAINS. Their location. Comparison with Rocky Mountains: in height; in appearance.

19. Plains.

In the map on p. 24 what part of North America seems smoothest and flattest? Is there a place near your home where the ground, for a great distance in every direction, is flat and nearly level? Such a place is called a *plain*.

The central part of North America is a vast plain. What mountains border this great central plain on the west? On the east? By what is it bordered on the north? On the south?

Did you walk uphill or downhill in coming to school this morning? Perhaps part of the way the ground was so nearly level that you could not tell whether it sloped up or down. If your path had been alongside of a stream of water, even though flowing in the gutter, you could have told which way the ground slopes.

How does the flow of water show this?

Much of the great central plain of North America is so nearly level that you cannot see its slope. How can you tell which way it slopes? The *rivers*, or large streams, are shown on the map (p. 24) by white lines. You see that several of them flow from the Rocky Mountains or the Appalachian Mountains, across the plain to the sea. Notice these rivers, and tell which way the northern part of the plain slopes; the central part; the southern part.



Such a place is called a plain.

The part of the plain near the Rocky Mountains is higher than the tops of the Appalachian Mountains, and might be called a *plateau*, which is another name for a high and broken plain. The parts of the central plain near the Appalachian Mountains and between the Gulf of St. Lawrence and Hudson Bay are also low plateaus. These higher parts slope gradually down to the central part of the plain, which is a broad lowland.

East of the Appalachians is a small plain. What ocean borders it? Which way does this plain slope? It is called the *Atlantic coast plain*.



Part of the Atlantic coast plain.

Model North America, showing the Rocky Mountain highland, the Appalachians, and the central plain.

TOPICS FOR ORAL OR WRITTEN WORK.

- I. PLAINS. A plain. A plateau.
- II. GREAT CENTRAL PLAIN. Its location. Its borders. Its slopes. Its plateaus. Its lowlands.
- III. ATLANTIC COAST PLAIN. Its location. Its slope.

20. Drainage.

In what direction does the southern part of the central plain slope? What river shows this? It is the largest river of North America. Several large rivers flow into it and are called its *branches*. Any stream is a branch of the stream into which it flows. Name two branches of the Mississippi flowing from the west. In what direction, then, does the western part of the central plain slope? Name one eastern branch of the Mississippi. In what direction does the eastern part of the central plain slope?

Hold this book open as shown in the picture. So held, the book forms a little trough with two side slopes and a bottom slope. This is like the great trough in the land in which the Mis-

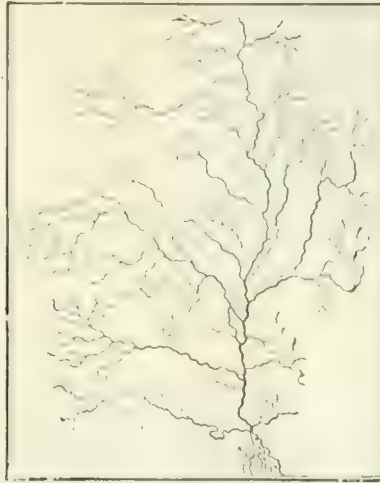


issippi flows, except that the land is not so smooth and regular. What is such a trough in the land called?

How wide a valley have you seen in your walks? The Mississippi valley is hundreds of miles wide, and its side slopes are very gradual.

Let us travel up the Mississippi to the place where the Ohio joins it. This place is called the *mouth* of the Ohio. The place where any stream flows or empties into a larger stream

or other large body of water is the mouth of the stream. Point to the mouth of the Mississippi; of the Arkansas; of the Missouri. If we travel up the Ohio from its mouth, we shall pass the mouths of many streams, for the Ohio, like the Mississippi, has many branches, though they are not shown on the map. If we ascend these branches, we shall find that they, too, have smaller branches, and these have still smaller branches, until the streams are mere brooks or rills. A river, with all its branches, big and little, is called a river *system*.



A river system.

When rain falls, some of the water flows directly into the streams, but much of it sinks into the ground. The ground can hold much water. The water-soaked ground often rests upon a bed of rock or clay, so that the water cannot sink further, but trickles down until it reaches the surface and bubbles out as a *spring*, as shown in the picture below.



A section through a spring.

When you walk in the country, and come to a spring, you will know that the water bubbling out into the little pool fell as rain, perhaps weeks before, and has been flowing underground ever since. So springs may flow throughout dry seasons.

There are many such springs in the central plain, from each of which a little stream flows to join other streams and become part of the great Mississippi system. The place where a stream begins or rises is the *source* of the stream. It may be a spring, or a pond, or a marsh, or the melting snow and ice upon some mountain side. Point to the source of the Mississippi; of the Arkansas; of the Missouri.

All the land sloping toward any stream of the Mississippi system is in the Mississippi valley or *basin*. A stream basin includes all the land drained by the stream and by any of its

branches. Point out the basin of the river in the picture below. Draw your pencil around the basin of the Mississippi River. (Map, p. 24.)

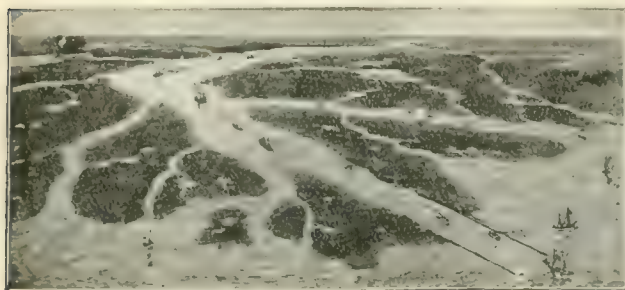
In the lower part of the Mississippi River the water is muddy. Where do you think the mud comes from? Where does the mud in the gutters come from, on a rainy day?

Swift streams wash away particles of the land through which they flow. If the earth on a hillside is loosened in any way, the rain water will wash much of it down to the lower land. If this should go on long, what would happen to the hillside? Streams are always carrying loads of earth from the highlands, but



A river basin.

in the springtime they carry more than at other seasons. Why? The soil of many a fer-



A delta.

thus gradually built up until a fan-shaped tract of low marshy land is formed, through which the river empties by several mouths. This tract of land is called a *delta*. It is constantly being built farther into the Gulf. Many other rivers build deltas at their mouths in this way.

Model North America; show the three slopes of the Mississippi basin.

TOPICS FOR ORAL OR WRITTEN WORK.

- I. MISSISSIPPI BASIN. Location. Extent. Surface: its western side slope; its eastern side slope; its bottom slope.
- II. MISSISSIPPI RIVER. Source. Direction. Mouth. Principal branches. Flood plain. Delta: what it is; how it is made.

tile field west of the Appalachian Mountains is being washed down into the Ohio River.

The water in the lower Mississippi sometimes rises, so that it overflows the banks and covers the country on either side with a shallow expanse of muddy water. Put a lump of earth into a tumbler of water, stir the water until it is very muddy, and let it stand awhile. What happens to the earth when the water becomes still? When the water of the Mississippi spreads over its banks, it ceases to flow so fast, and drops part of its load of earth. The land on both sides of the lower Mississippi is covered many feet deep with soil left in this way by the river. The plain thus built up by the Mississippi is called its *alluvial* or *flood plain*. Nearly all rivers have flood plains formed in the same way. Such plains are generally very fertile.

Strong *levees*, or embankments, are built along the banks of the lower Mississippi to keep the water from overflowing and destroying the towns and farms on its flood plain.

The current of the Mississippi is checked as it flows into the Gulf of Mexico, and much of the earth in its muddy water settles to the bottom. The bottom at this place is

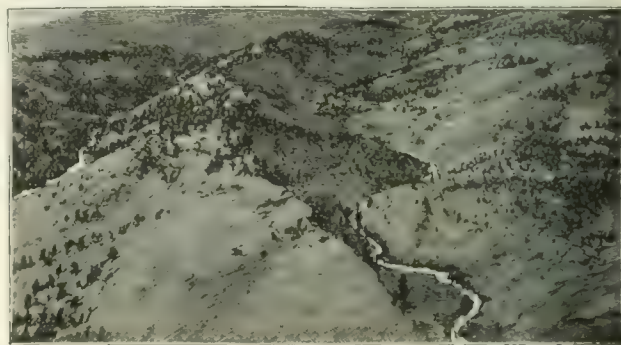


A flood in the Ohio River.

21. Drainage, *Concluded*.

Below is a picture of two stream basins, side by side. Point to the rim between them. If rain falls on this rim, which way will the water flow? The rim between two basins is called a *divide*. Why? A divide need not be very high, but it must

be a little higher than the land on either side of it. Why?



The rim between two basins is called a divide.

In what direction does the land north of the Mississippi basin slope? How do you know?

Point to the divide between the Mississippi basin and the basins north of it. This divide extends across the central plain, and it is not very high. In some places the ground slopes from it on each side so gradually that it seems to be perfectly level.

North of the Mississippi basin are the basins of several large rivers.

What river flows down the east slope of the Rocky Mountains toward Hudson Bay? There is a great dam or obstruction across the lower part of its valley. When a river meets such an obstruction, it spreads out and must fill the hollow before it can

flow over the dam and continue its course. The pool of still water above the dam is called a *lake*. How big a lake have you seen? The lake in the Saskatchewan basin is so big that at the widest part you cannot see across from one shore to the other. What is its name? What river

flows into it? A river which flows into a lake is called an *inlet*. What river flows out of Lake Winnipeg? The river flowing out of a lake is called its *outlet*. A lake may have many inlets; but it seldom has more than one outlet.

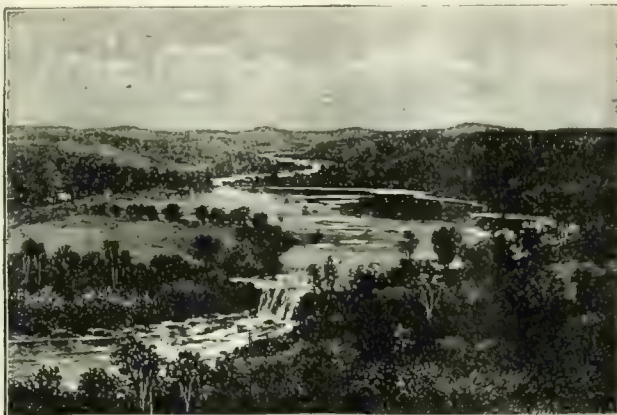
What river flows down the east slope of the Rocky Mountains into the great central plain and then northward to the Arctic Ocean? What three lakes are in its basin? There are thousands of lakes in this part of the central plain, but only the largest are shown on the map. Point to the divide between the Saskatchewan and the Mackenzie basins.

What three great river basins have you found in North America which extend as far west as the Rocky Mountain highland? What other river basin slopes from this highland to

the Gulf of Mexico? Which is the only great basin in the central plain that does not extend so far west as the Rocky Mountain highland? Draw a line around the St. Lawrence basin. What lakes are included in it? These are called the Great Lakes because of their great size. One of them is the largest fresh-water lake in the world.

Toward what oceans do all the great basins we have studied slope? Toward what ocean and from what mountains do all the other great basins of North America slope? So the Rocky Mountain highland divides North

America into two great slopes, a slope toward the Pacific on one side, and a slope toward the Arctic and Atlantic on the other side. This great divide between the eastern and western slopes of North America is called the *continental divide*. For much of its length it lies along the top of the Rocky Mountains.



The pool of still water is a lake.

What is the most northern river of the Pacific slope? Into what sea does it flow? What river flows directly into the Pacific? Into what gulf does the Colorado flow?

Sketch North America, and show the principal rivers.

TOPICS FOR ORAL OR WRITTEN WORK.

- I. DIVIDES. Definition. Continental divide: position; comparison of the slopes into which it divides North America, — in direction, in size.
- II. SLOPES. Rivers in the Atlantic slope. In the Arctic slope. In the Pacific slope.

22. People and Subdivisions.

The map on the next page shows, by means of the little dots, the parts of North America in which most of the people live. In the parts where the dots are closest together the number of people is greatest, but in the places where there are few or no dots very few people live.

It will be seen that most of the people of North America live in two great groups. Where is one group? Where is the other? Hardly any one lives in the cold, northern part of America, and few people live in the Rocky Mountain highland, except in the south.

Because Englishmen discovered and explored the eastern shore of North America, the English people claimed nearly the whole of the continent, and England still rules the northern part, called the Dominion of Canada, in which we live. Find it on the map.

Great Britain also owned the eastern part of North America, south of Canada, and many people came from England to live there. They settled all along the coasts and rivers in *colonies*, and more people kept coming over from the British Isles for many years until at last there were thirteen of these colonies. After 160 years the country east of the Appalachians was the home of three million *colonists*, who rebelled against George III. on account of the laws which were made about paying taxes. At the end of the war they set up a new government of their own and called the country the United States, which now extends across North America. Find it on the map. Find Alaska, which belongs to the United States. The English language is spoken by most of the people in the United States.

The part of North America west of the Gulf of Mexico and the Caribbean Sea was

settled by white men who followed Columbus to America from Spain. Most of the people living there still speak the Spanish language and might not understand us if we talked to them in English.

For a long time the King of Spain made laws for these countries and claimed to own them, but at last his soldiers were driven away by the Spanish settlers, who now own the countries and make laws for themselves.

The country west of the Gulf of Mexico is called Mexico, while the narrow strip of land between Mexico and South America is called Central America. Why?

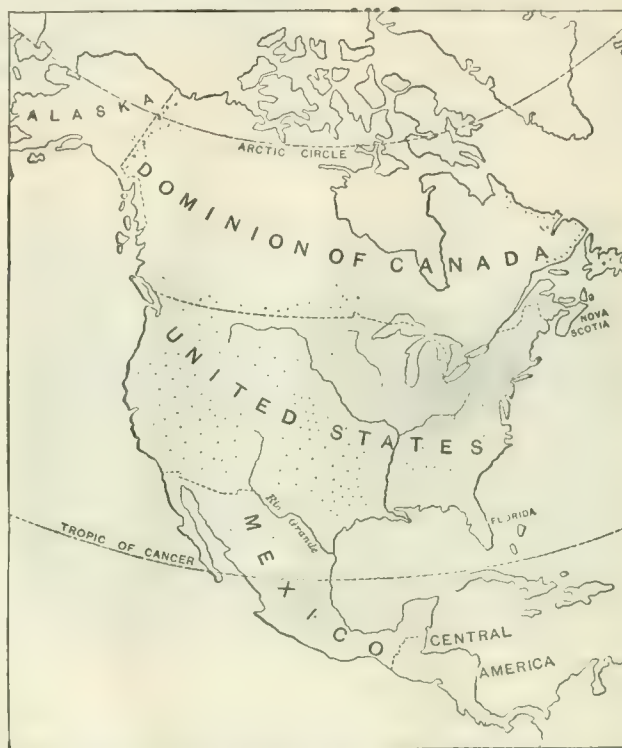
Find Mexico on the map. Find Central America. What language is spoken in these countries? What language is spoken by most of the other people in North America? What, then, is one important difference between

the two great groups of people in North America? The Rio Grande may be said to separate the English-speaking from the Spanish-speaking people of North America.

Sketch a map of North America; show where most of the people live, and mark the boundary line between the English-speaking and the Spanish-speaking peoples.

TOPICS FOR ORAL OR WRITTEN WORK.

- I. PEOPLE OF NORTH AMERICA. In what parts most of the people live. How they are divided according to their language.
- II. ENGLISH NORTH AMERICA. Countries. To whom each belongs.
- III. SPANISH NORTH AMERICA. Countries.



People are most numerous where the dots are thickest.

DOMINION OF CANADA.

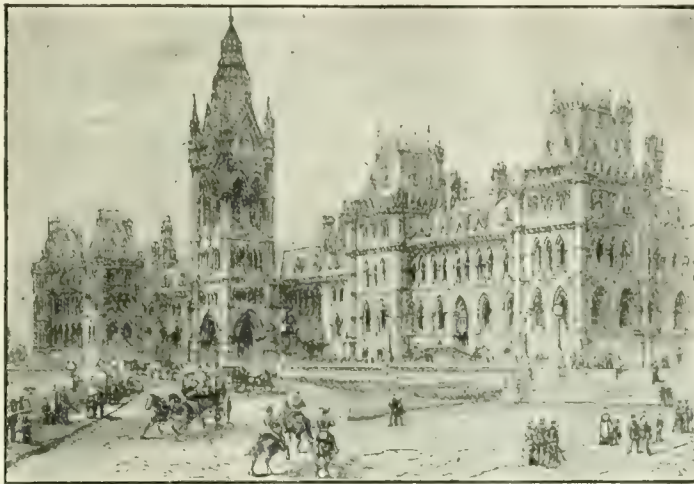
MAP STUDIES.

What country lies south of Canada? Point out the parts of the boundary formed by straight lines. What are the other parts of the boundary line? Which boundaries are made by water? Which side of Canada is broken up into large islands? What great bay is found towards the middle of Canada? (Page 27). Name the Great Lakes that lie west and north-west of Hudson Bay? Where is the St. Lawrence?

WHEN the first white men came to America to live they found the country covered with forests and inhabited by Indians. These early settlers came mostly from France, Spain, and the British Isles. At first the British held only a narrow strip along the Atlantic coast; for the French took the northern half, and the Spaniards made themselves masters of the southern half of the interior. By and by these three nations went to war over the division of the new world, and long wars followed, cruel wars in which the savage Indians took sides. At last the French and the Spaniards were obliged to yield to the British, which now became the ruling power. But large bodies of French remained in Canada, and their children's children still live here, chiefly in the Province of Quebec. The descendants of the Spanish pioneers dwell in the south-west of the United States, in Mexico, and in Southern America. The British settlements gradually occupied the valley of the Ohio and later on the whole valley of the Mississippi. They also crossed over Lakes Ontario and Erie and began to settle the territory which we now

call the Dominion of Canada. The other British colonies rebelled against the mother country in 1774 and formed a nation of their own, which is called the United States. But the Canadians, both French and English, refused to join this rebellion and remained loyal to the British flag; and many people in the eastern colonies were also unwilling to join in the revolt and came to live in Canada, where they were known as the United Empire Loyalists. They settled in Nova Scotia, New Brunswick, and Ontario, and before long very large num-

bers of people came from England, Ireland, and Scotland and made their homes in Canada. Little by little the population has increased for more than a hundred years, and now Canada has between seven and eight millions of people. Its extent of land is larger than the United

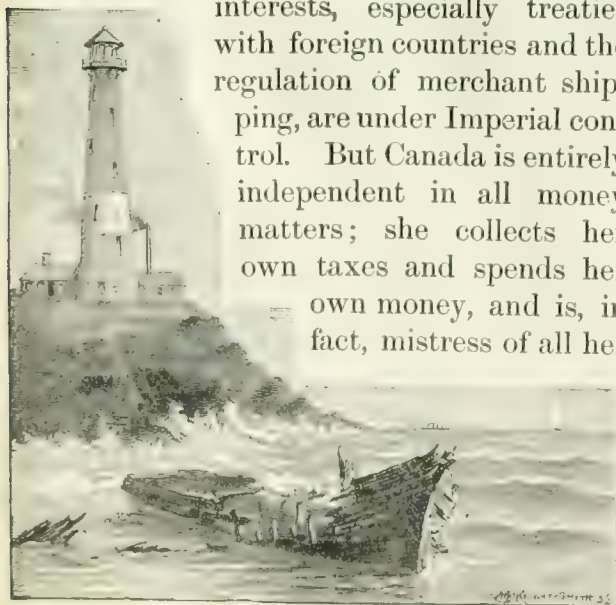


Central Block, Parliament Buildings, Ottawa

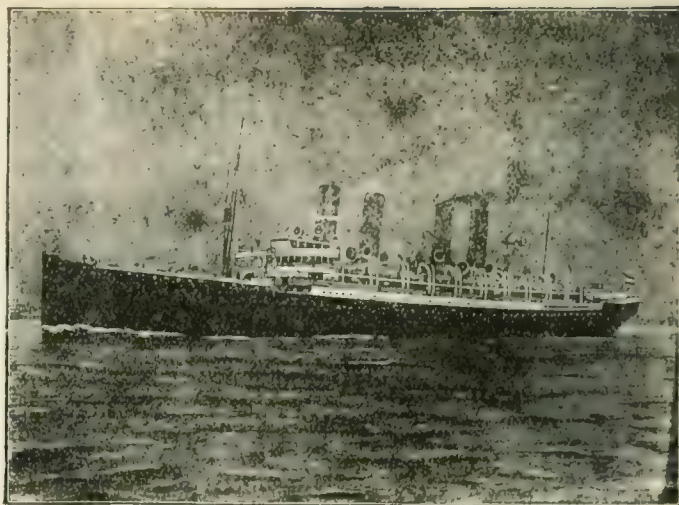
States, and is nearly as big as Europe. It forms about one-third of the British Empire. Some of our large tracts in the north are too cold for agricultural purposes, but they are rich in furs and minerals, such as gold, copper and petroleum. Canada was at first merely a number of scattered settlements widely separated. Then provinces were organized, and in 1867 four of these provinces were united under one general government and called the Dominion of Canada. These provinces were Ontario, Quebec, New Brunswick, and Nova Scotia. A little later Prince

Edward Island, Manitoba, and British Columbia joined the Dominion, and in 1905 the provinces of Saskatchewan and Alberta were formed out of the territory which lies between Manitoba and British Columbia. The island of Newfoundland and a narrow strip along the coast of Labrador are the only parts of British territory in the north of this continent that are not included in the Dominion of Canada. Ottawa is the capital, where chosen men meet to make our laws. A body of men of that kind forms a *parliament*, or legislature, and this is the parliament of Canada. Each province has its own Lieutenant-Governor and local parliament to deal with matters that concern that province alone, while the central or Dominion Government, under a Governor-General, looks after the general affairs of the whole country. Such a system of dividing the power of making laws is called a *federation* or a *federal system*.

As Canada is a British colony our Governor-General is appointed by the British Sovereign, who is at the head of the British Empire. All matters involving Imperial interests, especially treaties with foreign countries and the regulation of merchant shipping, are under Imperial control. But Canada is entirely independent in all money matters; she collects her own taxes and spends her own money, and is, in fact, mistress of all her



A Lighthouse.



An Ocean Greyhound.

own resources, and one of the freest countries in the world.

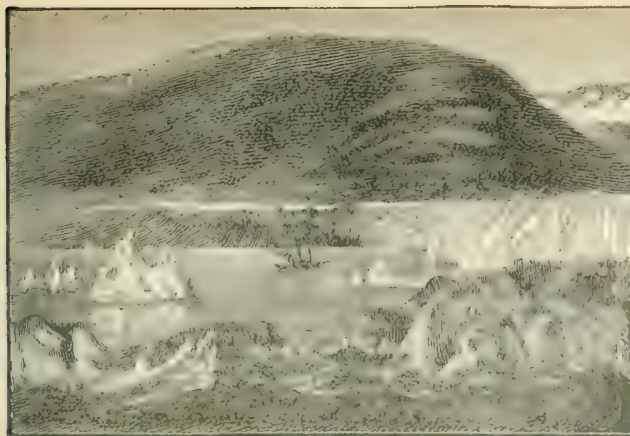
Besides the nine provinces, Canada has two districts. These are Yukon, which has its own local government and capital, Dawson, and the vast region lying east of Yukon, and west of Hudson Bay and stretching northward from the provinces to the Arctic Ocean, called the North-West Territories.

Position and Coast Line.

Where are Quebec, Toronto, Winnipeg, Halifax, Fredericton, Regina, Charlottetown, Victoria, Edmonton, Montreal, Vancouver, Brandon, Ottawa, New Westminster, St John, Fort William, Calgary, Hamilton, Three Rivers, and Hull?

Canada has an excellent position for the exchange of goods with all other parts of the world. All along the great waterway formed by the St. Lawrence and the great lakes, and also by means of railways that run overland, we trade with the United States. We also trade by sea and send ships to Australia, China, and Japan on the west, and very many more across the Atlantic to England and the Continent of Europe. The coast line on both sides of Canada is full of bays that enter the coast and form numerous harbors. On both sides we have several of the finest harbors in the world.

Our country is so wide from east to west and also from north to south that many different



Glacier.

sorts of plants and animals thrive in it, and it is so large that we have room for many millions of people. Canada is a prosperous and growing country, partly on account of the sturdy people who settled here and the free institutions and good laws they have established; partly because of the great resources of the country in timber, fish, minerals, and farm products; and partly owing to its position which gives it short routes over the seas.

The coasts of Hudson Bay and the broken shores of the Arctic are of little use in navigation because the ice blocks these seas for most of the year. But an extensive coast trade is carried on along the Atlantic and the Pacific shores.

Relief.

From which ocean do most bays enter our coast line? Point out a river on each side whose mouth forms a harbor. Point out one large gulf or bay and one smaller one on each side of Canada.

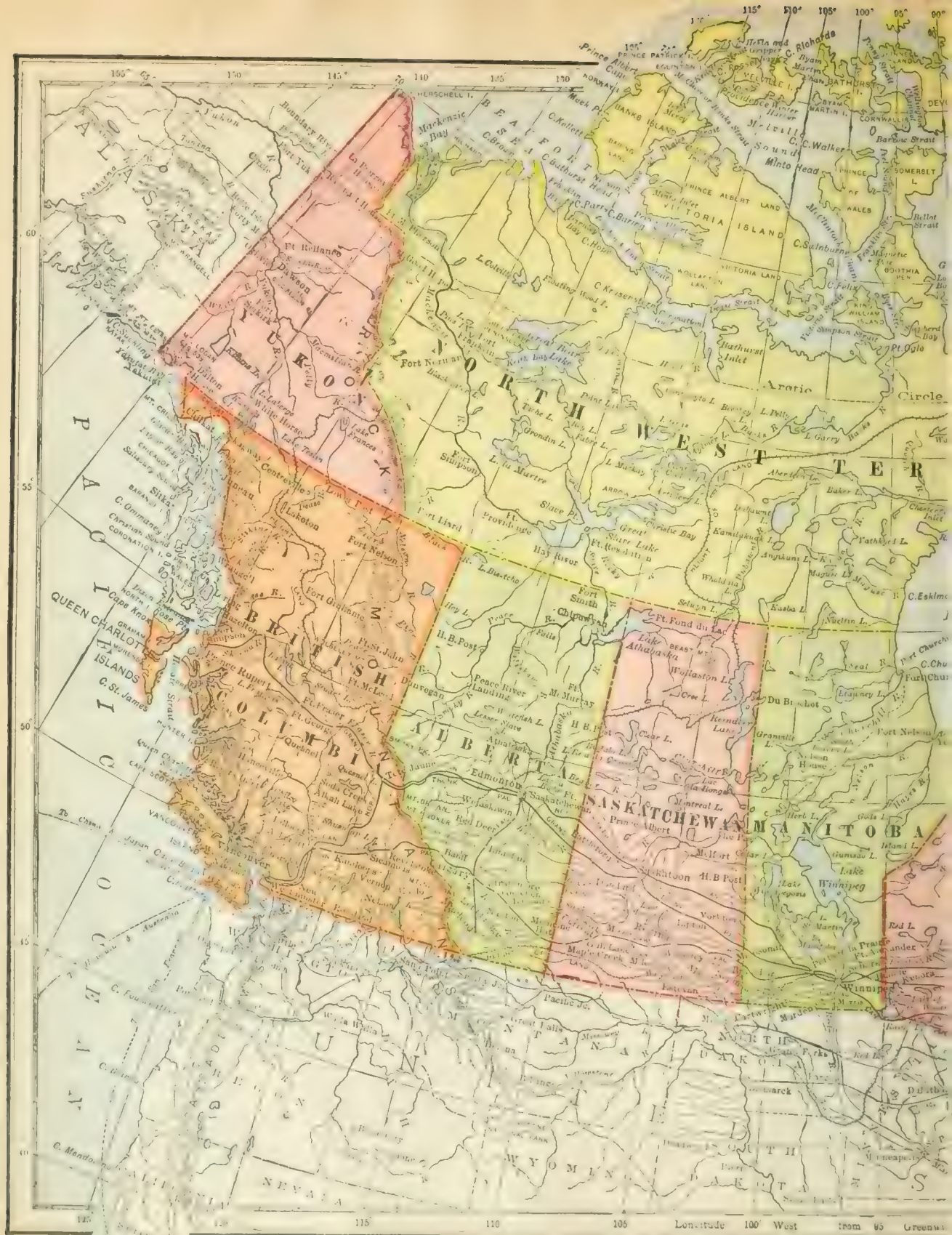
The Appalachian chain extends along the eastern side of America, and is lowest at the north, where it passes over Canada east of the St. Lawrence under the name of the Notre Dame Mountains, which reach to Gaspé. Parallel spurs of this system, are also found in New Brunswick and Nova Scotia. The Laurentian highland begins with a broad,

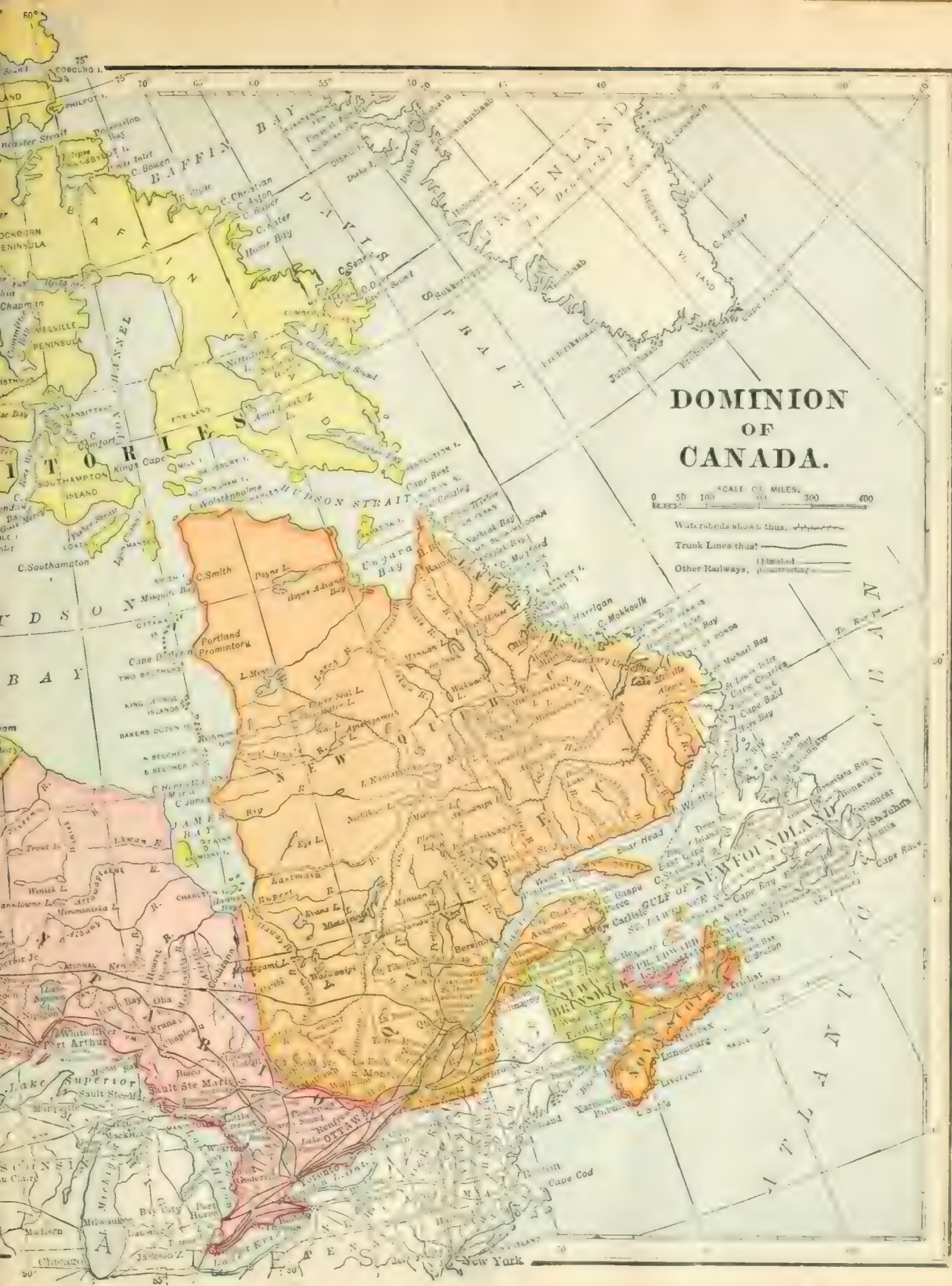
high plain or plateau in the Labrador Peninsula, and extends southwest toward the Georgian Bay and Lake Superior. North of Ontario the Laurentian highland bends northward and, passing west of Hudson Bay, reaches toward the Arctic Ocean. This broad, curved highland is lower than the Appalachian system, and is often known as The Height of Land. It encircles Hudson Bay on three sides. A branch or off shoot of this height crosses Saskatchewan and extends towards the Rocky Mountains. It is the *divide* or *watershed* between the great valley of the Mackenzie River on the north and the immense plains of the Saskatchewan on the south.

These two immense river valleys occupy the heart of Canada, and their waters come from the Rocky Mountains, which rise like an enormous wall along the western limit of these river systems. Near the mouth of the Mac-



Trading Post, Hudson Bay Company.





**DOMINION
OF
CANADA.**

0 50 100 150 200 250 300 350 400
SCALE OF MILES.

Watersheds shown thus:
Trunk Lines thus:
Other Railways, (dashed line symbol)

kenzie they are low and form the divide between that river and the Yukon. Southward the Rocky Mountains grow higher and higher,



Railroad across the Rocky Mountains.

and are flanked westward by a broad plateau which in the middle parts of British Columbia rises from 3,000 to 5,000 feet. This interior plateau is broken up into long, narrow valleys by rapid rivers, and extends southward to the United States and westward to the Coast Range Mountains. Between this latter range and the Pacific Ocean lies the coast plain, which is deeply notched by long, narrow bays bordered by steep walls of rock. These bays are often called fiords. The coast plain is very narrow towards the north, but broadens out at the southern part of British Columbia. Outside the coast lies a long chain of islands which are the remains of a former range of mountains 2,000 miles long that has been partly covered by the Pacific.

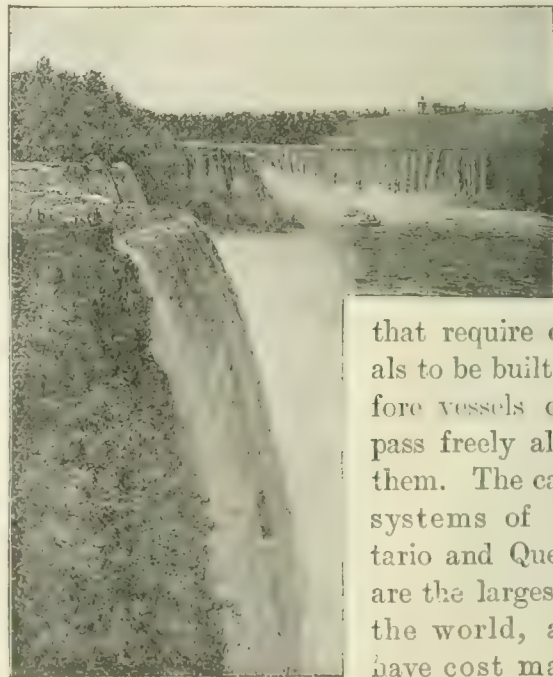
Name the largest islands along the Pacific coast. Islands of this kind that have been broken off by the sea are called *Continental Islands*.

Drainage.

Which is the largest province in Canada? (Page 55) Which is the smallest? What territory borders on Hudson Bay? What provinces touch its borders? What province lies west of the province of Manitoba? Through what territory does the Mackenzie flow? What is the most eastern province of Canada? Name the most western. Which province lies farthest south? What province lies between

Ontario and New Brunswick? West of Ontario? What are the remaining divisions of Canada? Where is the Yukon territory? Point out the three great rivers of Canada. Tell where each of them empties its waters.

The interior of Canada is traversed by mountains and plateaus that divide it into three great systems of drainage. The valley of the St. Lawrence on the Canadian side includes the southern parts of the Provinces of Quebec and Ontario. The northern parts of these provinces drain into the Hudson Bay. All the rivers of this system, even the great St. Lawrence itself, have pretty swift currents and often rapids and waterfalls. They supply power for driving machinery and enable us to manufacture goods for market and to produce electricity for lighting, for running railway cars, and other purposes. The St. Lawrence and many of its branches, such as the Ottawa, the Richelieu, and the Trent have long stretches of navigable water; but that immense river and most of its tributaries have rapids



Niagara Falls

that require canals to be built before vessels can pass freely along them. The canal systems of Ontario and Quebec are the largest in the world, and have cost many millions of dol-

lars. The scenery along the streams and lakes of this great river system is often very remarkable. The Falls of Niagara between lakes Erie

and Ontario, and the Thousand Islands at the head of the St. Lawrence, are celebrated the world over for their wild beauty. Ocean steamers and vessels ascend the St. Lawrence as far as Montreal, and sea-going ships, con-



C. P. R. Bridge over the St. Lawrence.

structed to pass through the canals, can sail to the farthest extremity of Lake Superior, a distance of more than 2,400 miles inland.

The next great drainage system is that which empties its waters into Hudson Bay. It includes Manitoba, Saskatchewan, Alberta, and part of the North-West Territory. The Churchill, with its numerous lake expansions; the Saskatchewan, with its long branches and large lakes; Red River, Winnipeg River, English River, the Albany, and the Nelson—these are the great outlets for the waters of the vast plains that stretch from the Lake of the Woods to the Rocky Mountains, and extend around the rim of Hudson Bay, reaching northward to the northern part of Saskatchewan. The Saskatchewan and most of the rivers connected with it are navigable by small steamers, thus forming another immense system of river navigation which is of great value to the country. Not many of these streams supply much water power; but in southern Alberta the water is diverted from them in some places and used to water dry plains. This is called *irrigation*, and it makes agriculture flourish where it would be uncertain or impossible without *irrigation ditches*.

The northern part of Saskatchewan and all the northern portions of Alberta and the western part of the North-West Territory belong to the third great drainage system of the interior of Canada which has the Mackenzie River for its waterway. The whole course of the Mackenzie and its affluents is through fertile land covered with forests. This river and its connections supply thousands of miles of navigable waters and immeasurable water power, all of which will some day be turned to effective use as the population increases. The Mackenzie itself is navigable for 1,300 miles, and trees a foot in diameter are found growing at the *delta* of the river; garden vegetables thrive at the trading posts scattered here and there along its course. The northeastern part of Saskatchewan and the part of the North-West Territory west of Hudson Bay are chiefly level, treeless plains, a swampy expanse of rock, lake, and muskeg. This region is known as *The Barren Lands*, the home of the musk-ox, the reindeer, and all kinds of waterfowl.

Besides these three immense systems of continental drainage, we find several minor systems. Yukon District is drained by the Yukon River into Bering Sea. The southern parts of



An Irrigation Canal.

British Columbia are drained southward by the Columbia and the Fraser. The coast has short rapid streams that enter the hundreds of long, narrow bays. New Brunswick and Nova Scotia, on the other side of the continent, are drained into the Atlantic waters by small rivers.

What other great river rises south of the Athabaska? To which drainage system does it belong? What river has its source north of the Athabaska? Notice its two branches in British Columbia, and see how it cuts through the mountains, forming a water-gap. What branch has the Peace from Alberta? Does it cut a water-gap through the Rocky Mountains? Learn the names of other passes in these mountains. What is the general direction of the Athabaska? Of the Peace? Where does each empty? What river drains Lake Athabaska? What is the next great lake? What river drains Great Slave Lake? What branch does that river receive from British Columbia? Name the two tributaries of this branch. What waters does the Mackenzie receive from the east?

Heat and Rainfall.

Canada reaches from the cold regions of the north to the warm and fertile belt of the south. The southern half gets much more heat and



Cedar, Stanley Park, Vancouver, B.C.

moisture than the northern half; also the Pacific Coast is much warmer than the Atlantic Coast. This is what we mean by a difference of climate. In the far north the summer lasts only a few weeks, and the heat is

only sufficient to grow such plants as moss and lichens. But the greater part of Canada lies in what is called the *cool belt* of climate, and has sufficient heat and rain to produce vegetables, fruit, grain, and large forests of timber. Snow falls in winter in every part of Canada, and in most places skating and sleighing make the cold months very enjoyable. It is a land of sunshine, and has nearly one half more bright days than England or Holland or Northern Germany. On the Pacific side the moderate climate extends as far north as Yukon; but on the Atlantic side the cold region extends as far south as the middle of the Labrador Peninsula. In

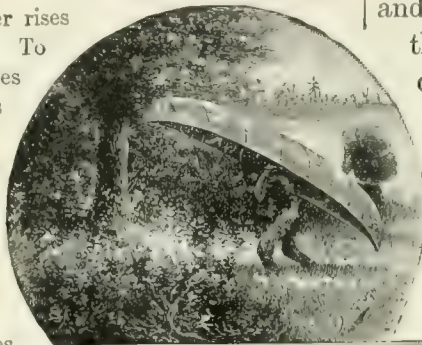
the western part of the great central plain the climate is so mild that forest trees grow along the Mackenzie beyond Great Bear Lake, and in the Yukon there is plenty of small timber along the streams for

firewood and mining purposes. No trees can grow in the northern parts around Hudson Bay. In the western plains of Manitoba, Saskatchewan, and Alberta the prairies have no trees except along the margins of the rivers because the fires that run over the grass destroy them. But the trees

which the settlers plant on the farms grow very well. The treeless district of the north resembles the northern parts of Europe



Public Gardens, Halifax, N.S.



Portage and Dog Sleds.



These Plains were once the feeding-place of great herds of Bisons.

and Asia and is rich in furs and fish. It also contains valuable minerals, and will by and by yield much gold, nickel, copper, coal, petroleum, and salt.

Can mines and wells be sunk in very cold countries? Find out something about the mines of Siberia.

When a kettle boils, some of the water is turned into vapor and passes into the air in little drops so tiny that we cannot see them. They are so small and light that they float in the air when it is warm. From every pond and stream and lake vapor is constantly rising, but most of all from the great wide ocean that covers about three-fourths of the world. The winds carry it about, and thus a great deal of vapor from the sea is brought over the land hundreds of miles away from the ocean. But cold air cannot hold so much vapor as warm air, so that when the wind turns cold over the land some of the vapor is dropped. Sometimes we see these vapor drops floating as *mist* and often far overhead as *clouds*, and sometimes they fall down in the form of *rain*. If these drops are frozen on the way down they form ice crystals, and appear as *hail* and *sleet* or beautiful flakes of *snow*. Thus the rain comes from the clouds, which are the chilled vapor that rises from the wide, wide sea.

Most of the winds blowing over

Canada come from the west and southwest. Where do these winds get their moisture? The west winds are cooled down so much in passing over the Coast Range along the Pacific that they lose much of their moisture on the western slopes of these mountains, which therefore have very heavy rainfall. In passing over the lofty Rocky Mountains, these winds are still further robbed of their vapor, and reach the great central

plain as dry winds and bring very little rain or snow with them. Thus the western and southern parts of the great plain, including Southern Alberta and Southern Saskatchewan have a very dry climate, with very little snow in winter, and a long, rainless season in summer. Farther north the mountains decrease in height, and more moisture is carried over them to the central plain thus Northern Alberta and Northern Saskatchewan have good sleighing in winter and more rain in summer. Farther south, in the United States, the central plain is still drier, so that large tracts are *desert* for want of moisture. But in Canada only a small part just along the boundary is *arid*. Most of our part of the prairie country gets sufficient rain and snow to make crops fairly certain, and immense



Cattle herding on the Great Plains.



Laurentide Pulp and Paper Co.'s Mill.

quantities of wheat are produced there. Farther east the winds come from the Gulf of Mexico. In what direction is that gulf from Ontario? These southwest winds sweep up the valley of the Mississippi and cause abundance of rain and snow. The great lakes also supply moisture to the surrounding districts. Ontario, Quebec, New Brunswick, Prince Edward Island and Nova Scotia likewise receive much water from eastern winds that blow in from the Atlantic. Hudson Bay, to the north, also supplies some rain and snow to these provinces, so that they are well watered and crops are certain.

Industries.

There are several great regions of our country in each of which the climate or the soil or the character of the people makes it possible to do some one kind of work better and more easily than any other. That kind of work is likely to be the chief occupation of the region. Farming may be carried on in nearly all parts of Nova Scotia, Prince Edward Island, New Brunswick, Quebec, Ontario, Manitoba, and most parts of Alberta and Saskatchewan.

Agriculture.

In all these provinces *agriculture* and cattle-raising are the principal occupations of the people. Grain-growing is the chief business

of most of our farmers, and Canada has one of the finest wheat belts in the world.

At the mouth of the Peace River on Lake Athabaska was grown fine wheat that took a prize at the Centennial Exhibition. Besides wheat our farms produce great quantities of other useful grains, such as barley, rye, peas, buckwheat, beans, and Indian corn. What use is made of each of these grains or *cereals*? From the animals of the farm—the cattle, hogs, sheep, and poultry—we get meat, milk, butter, cheese, eggs, hides, skins, and wool; we also sell thousands of horses. Our farms produce good crops of hay, turnips, potatoes, carrots, beets, tomatoes, and mangel-wurzels that are food for animals or for men. Flax and hemp are also grown. On the farms in many districts are valuable orchards of the best apples in the world. Besides plums, pears, cherries, strawberries, currants and other small fruits, peaches ripen in some parts of Canada and grapes thrive in almost all the provinces. Tobacco is an important crop in a good many districts. Thus Canada's greatest *industry* of occupation is agriculture.

Forests.

But the forest products of Canada are also very important. Canadian lumber made from maple, beech, elm, ash, pine, cedar, spruce, balsam, oak, walnut, butternut, chestnut, basswood, cherry, hickory, birch, or Douglas fir



Harvesting Wheat in Manitoba and the North-West.



Loading Deals.

finds its way to all parts of the world. Collect specimens of all the different woods you can get. The Canadian sawmills are among the most extensive and perfect in the world. Lumbering in all its stages employs a large number of our people in cutting, hauling, rafting, sawing and shipping the square timber, scantling, planks, boards, and laths. The sawdust and the slabs are also used up to make pails, tubs, paper, and matches. Altogether we get a great deal of money from our immense forests of valuable timber. Even small trees are valuable, because they can be made into paper pulp, which sells as readily as wheat. Tanbark, tar, turpentine, and charcoal are also obtained from our forests. Let each pupil choose a Canadian tree and then talk to the class about it.

Fisheries.

The fisheries of Canada are of great importance to the country. Our innumerable fresh-water lakes and rivers over the whole extent of Canada abound

in excellent fish, and the salt-water fisheries are the most productive in the world. In Nova Scotia, New Brunswick, Prince Edward Island, along the St. Lawrence and the Great Lakes, in Quebec, Ontario, Manitoba and the Territories, fish supplies a great deal of food for our people, besides what is shipped to the United States and other countries. The dried codfish of the Gulf of St. Lawrence and the canned salmon of British Columbia are known the world over. Other valuable fish are trout, whitefish, salmon, mackerel, haddock, and halibut. Lobsters and oysters abound along the shores of the Maritime Provinces, and seals yield oil and fur.

Name over all the kinds of fish you have seen. How are fish caught? What is the largest fish caught in fresh water? Where are seals found? Name all the products obtained from the codfish. From codfish are obtained flesh, tongues, and sounds, cod-liver oil, fish oil, and manure from the refuse. Where are oysters found in Canada? Are clams fit for food? How are lobsters caught? The halibut fisheries of Queen Charlotte Islands are said to be the richest in the world.

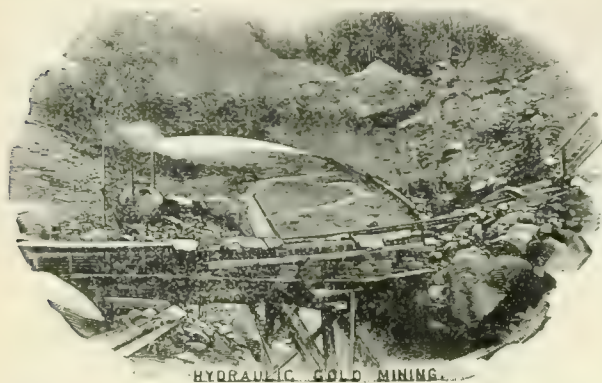
Mines.

Canada is one of the richest *mineral* countries in the world, that is to say, she has a great supply of valuable materials in the ground, such as metals, coal, petroleum, salt, etc. Nova Scotia, the great central plains, and British



Nickel Mines, near Sudbury, Ont.

Columbia abound in coal, generally of good quality. Iron ores of different kinds, some of them of the best quality, are found in almost every part of Canada. In Nova Scotia, Quebec, and Ontario iron ore is mined and smelted.



HYDRAULIC GOLD MINING.

Gold has been found in large quantities in British Columbia, in the Yukon, and in smaller quantities in Ontario, Quebec, and Nova Scotia. Rich ores of silver occur at various parts of Northern Ontario and in the southern part of British Columbia. At Sudbury, Ontario, immense beds of nickel are found associated with copper and iron. Petroleum is found in Gaspé in Quebec, and in Lambton and Kent in Ontario in large quantities, and in Alberta. Name the things that are made out of crude petroleum. Natural gas is found at Welland, Leamington, and Kingsville in Ontario. This furnishes a cheap source of heat to neighboring Canadian towns. The asbestos mines of Thetford and other places in Quebec are the largest in the world. Salt is found in great abundance in many parts of Canada, especially in western Ontario. Gypsum or plaster of Paris is found in Nova Scotia, New Brunswick, and Ontario. Mica, plumbago or black lead, and apatite or phosphate of lime are found in Ontario and Quebec and are valuable. Mineral tar, marble, lime, peat, and ornamental granite are other mineral products from which we make money.

Manufactures.

The manufactures of Canada are rapidly increasing. Creameries and cheese factories

turn out butter and cheese of highest quality, mills convert our wheat into flour, and at the pork factories bacon is prepared. The canneries preserve vegetables, fruit, meat, and fish so that they can be sent in tins all over the world. Large quantities of agricultural implements, steam engines, locomotives, musical instruments, furniture, lumber, leather, boots and shoes are all manufactured throughout the older provinces. Sugar, tobacco, and cotton goods are manufactured on a large scale, and our woollen mills, carriage factories, oil refineries, paper mills, sash and blind factories, and pulp mills are all homes of extensive and growing industries.

Trade.

Much of the produce of Canada is used by her own people. What one place supplies in larger quantity than is necessary for local needs is exchanged for articles produced in another part of the country. The manufactures of the towns are sold in return for the wheat, the meat, the butter and cheese of the farm, for the lumber of the forest, or for the coal of the mine. Many railway and steamship lines are thus profitably engaged in domestic or internal trade.

But the production of many articles far exceeds the demand for them in Canada. The surplus is exported to other countries. We



Coal is dug out of the ground.

supply Great Britain with immense quantities of lumber, grain, meat, dairy produce. Lumber, minerals, fish, etc., are sold to the United States. The West Indies, Germany, and France also purchase from Canada.

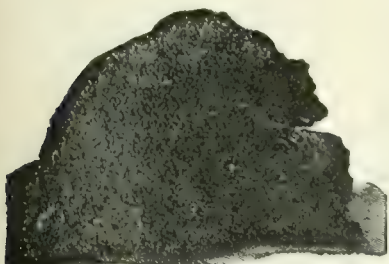
We import goods that are manufactured more cheaply abroad, and also the produce of climates warmer than that of Canada. We buy woollens, cottons, and hardware from Great Britain, the United States, and Germany; tea from India, China, and Japan; fruit from the West Indies, the United States, Italy, and Spain; sugar from the West Indies.

The foreign trade of Canada has increased very rapidly in recent years (see tables in the Supplement). It now amounts to nearly twelve hundred million dollars yearly. This trade is carried on chiefly from the ports of Montreal, Quebec, Halifax, and St. John, in the east, and from Vancouver and Victoria in the west.

Draw a map of Canada and mark the most important regions producing each of the following: Wheat, fruit, dairy produce, fur, lumber, coal, iron, gold. Name the chief commercial routes within the Dominion. With what countries does Canada carry on the largest trade? What are our exports to each of these countries? What are our principal imports from each?

The Fur Trade.

In the early history of this country the fur trade was the only great industry, and it is still an important one. Furs are at present the chief commercial products of the North-West Territory. Montreal is the



A Grizzly Bear.

great centre of the trade; but many cargoes of furs go to Europe by way of Hudson Bay. The most valuable skins are beaver, marten, mink, lynx, otter, and muskrat. On the coasts of Labrador and Newfoundland large quantities of seals are captured.

Government.

At the head of the British Empire, of which Canada forms a part, is King George V. The king is represented in Canada by the governor-general. The country is governed by the federal system, *i.e.*, a number of provinces have entered into a partnership for mutual advantage. Each province retains its own individual independence in local affairs and has given up other powers into the hands of a central government, in which all the provinces are represented. Hence Canada is governed by a number of provincial legislatures, each dealing with the local affairs of its own province, and by a central or Dominion Parliament at Ottawa. The Parliament of Canada consists of the Governor-General, the Senate, and House of Commons. The Governor-General is appointed by the British Crown; the senators are appointed by the Dominion Government for life; members of the House of Commons are elected by the people every five years, unless the House is dissolved by the Crown in the meantime. The various provinces are represented in proportion to their population. Quebec has sixty-five members, and the number of members of each province shall bear the same ratio to its population as sixty-five does to the population of Quebec.

Sections of Canada.

We may study Canada in detail in five sections.

(1) THE MARITIME PROVINCES, which are Nova Scotia, New Brunswick, and Prince Edward Island.

(2) THE ST. LAWRENCE PROVINCES: Quebec and Ontario.

(3) THE PRAIRIE REGION, including Manitoba, Saskatchewan, and Alberta.

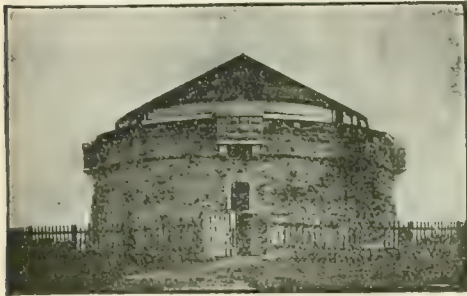
(4) THE NORTHERN TERRITORY: The North-West Territory.

(5) THE MOUNTAIN REGION, namely British Columbia and Yukon.

MARITIME PROVINCES.

NOVA SCOTIA.

Point out the Bay of Fundy, Chignecto Bay, and Bay Verte. What isthmus separates the last two? What provinces does it join? What large island forms the eastern part of Nova Scotia? What salt lake divides this island? Where



Martello Tower, Halifax.

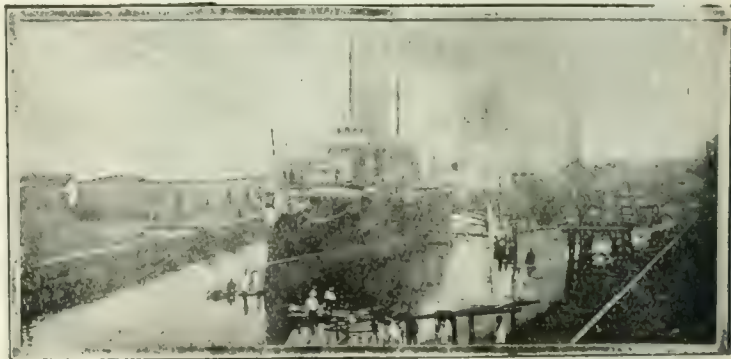
are the Cobequid Mountains? The North Mountains? The South Mountains? Draw an outline map of Nova Scotia showing the mountains and rivers. For what is Louisburg noted in history? Why are there so many people of French descent in Nova Scotia? By whom and for what reason was Halifax founded?

Position and Coast Line.

Nova Scotia includes the large adjacent Island of Cape Breton, which is separated from it by a mile of water at the Strait of Canso. On the west it connects with New Brunswick by the narrow isthmus of Chignecto, and the Bay of Fundy divides it from that province. Practically it is surrounded by water, and is 360 miles in length and from 65 to 100 miles in width. The coast line is about 1,500 miles long, and contains innumerable bays and harbors of all sizes. Most of them are very useful for navigation, but that part between Minas Basin and Digby Neck is steep and destitute of harbors. The warm gulf stream that flows along the east coast influences the climate.

Relief and Drainage.

The Cobequid Mountains ending at Cape Chignecto, North Mountain extending from Cape Blomidon to Digby Gut, and South Mountain running parallel to the latter, are the highest elevations. Most of the province slopes in a southeasterly direction from these mountain spurs. There are long, parallel ranges of hills and valleys that cross from east to west and diversify the surface. A belt of the sea coast is usually rocky and barren; from it no idea could be formed of the beauty and fertility of the interior. The Annapolis and the Cornwallis Valleys, for example, are protected from the chilly sea-fogs by the mountains, and are famous for fine apple orchards. Lakes and streams are very numerous. The short rivers produce water power, supply safe and commodious harbors, and teem with fish. The salt lake or enclosed sea-arm of Bras d'Or bisects Cape Breton, and the divisions differ widely in aspect. The northern part is mountainous, with bold, rugged promontories, but the southern portion is low and level and much broken by the sea. The valleys and plains



Docks at Halifax.



NOVA SCOTIA AND PRINCE EDWARD ISLAND.

SCALE OF MILES.
0 10 20 30 40

are fertile, the deep bays are alive with fish, and the scenery is very striking.

Industries.

Farming, fishing, mining, shipping, lumbering, and shipbuilding are the chief occupations. The forests supply plenty of timber and the building of ships goes on at many places. The West Indies, the United States, and Europe receive great supplies of lumber from Nova Scotia, which owns large fleets of ships for the ocean-carrying trade and also for the coasting trade. Her ships and sailors are found on every sea and in every port, and such towns as *Windsor* and *Yarmouth* own fleets of vessels and do a large seafaring business. *Lunenburg* and *Liverpool* are noted for their fleets and for shipbuilding. The coal-mines of Cumberland, Pictou, and Cape Breton supply abundance of coal of the finest quality and close to the sea. The coal fields are extensive and have seams from twenty-five to seventy-five feet in thickness. Side by side with these rich deposits is found iron ore of workable quality. At *Sydney*, *Londonderry*, and *Ferrona*, Pictou County, iron of excellent quality is made. The gold-fields of Nova Scotia have over thirty mines in operation along the east coast. Large deposits of gypsum abound and immense quantities are exported, as well as granite, marble, freestone, and lime. But the most productive industry is the business of catching and curing fish. Cod, herring, haddock, mackerel, and lobsters are the most important part of the catch. These are sent to Great Britain, Southern Europe, South America, and the West Indies.

The interior contains many fine stretches of farming land, where potatoes, apples, hay, oats, and cattle are raised for export,

chiefly to the United States and Great Britain. The salt marshes along the coasts produce fabulous crops of hay, owing to the dikes which enable farmers to irrigate the sea-meadows.

People.

The province of Nova Scotia was the scene of the first permanent French settlement in North America. The French founded a strong fortress at Louisburg, but in the end the whole country passed into the hands of the British, and Halifax was founded to secure their hold on this part of North America.

Chief Towns.

HALIFAX, the capital, is the largest city. It was founded in 1749 upon one of the best harbors in the world. It is strongly fortified and has a large dry dock. Its harbor is free from ice during the winter. *Sydney*, on the east coast of Cape Breton Island, has an extensive coal trade and produces large quantities of iron and steel. *Glace Bay*, *North Sydney*, *Springhill*, *Stellarton*, *Westville*, *Pictou*, and *New Glasgow* are coal-mining towns. *Yarmouth*, in the south-western part of the province, has extensive fishing interests and a large shipping trade. *Truro* is the seat of the Normal College and the provincial Agricultural College. *Amherst* manufactures boots and shoes, engines, and furniture. *Lunenburg* and *Liverpool* are lumbering and fishing centres. *Wolfville* is the seat of Acadia University, and *Windsor* of King's College, which was founded in 1790.

Point out Digby Strait, Minas Channel, and Northumberland Strait and tell what two bodies of water are connected by each. Where are St. Mary Bay and Digby Neck? What strait connects St. George's Bay with Chedabucto Bay? What cape near the mouth of Halifax harbor? What island lies out in the ocean south-east of Halifax?

NEW BRUNSWICK.

Draw an outline map of this province. Mark on it the chief bays, rivers, and towns. Mark also the courses of the railway lines. What are the chief occupations of the people in New Brunswick? Explain the drainage system of the province. Make a list of the kinds of fish caught in and near New Brunswick. How do the New Brunswick rivers alter in their lower stretches? Point out Grand Falls, Grand Lake, and Grand Manan Island. What bays form the north and the south boundary respectively? Where are Ship-pegan Island, Shepody Bay, and Salmon River? What kinds of ships are built in New Brunswick?

The province forms an irregular square, with Quebec on the north and the State of Maine on the west, and with coast lines along the south, east, and part of the northern boundary. The highland in the northwest corner belongs to the Notre Dame elevation, from which three chief river systems and many smaller ones take their rise. The Restigouche and the Miramichi flow eastward into the Gulf of St. Lawrence, and the St. John southward into the Bay of Fundy. The mouth of these and numerous other streams expand into fine bays and harbors which are of the greatest advantage for shipping, and the rivers themselves are often navigable for long distances, since the tide runs a long way up their channels. The soil along these river valleys is productive and the climate near the coasts is modified by the sea, especially on the south coast, where the influence of the Gulf stream is felt. The interior is only sparsely settled and has a climate similar to that of Quebec. It is free from the fogs that often prevail along the coasts, the rain fall is abundant, and the snow lies deep in winter, providing excellent facilities for lumbering. The

tides in the Bay of Fundy are very remarkable and rise from 30 to 50 feet, thus preventing the bays from freezing over in winter.

Industries.

Lumbering, ship-building, and fishing are the chief occupations; farming and mining stand next. The middle and northern portions are heavily timbered, water power is abundant, and the numerous sawmills along the rivers turn out vast quantities of timber and lumber to the value of over five million dollars per year, which goes largely to Europe. On the Miramichi and the St. John, ship-building was formerly a great industry, which has somewhat declined since



City of St. John, N. B.

iron ships began to displace wooden ones, but it is still a very important business at many coast towns. In shipping and ship-building the province stands next to Nova Scotia. The Coast fisheries are one of the greatest sources of wealth to the province.

The chief varieties

of fish taken are cod, haddock, herring, mackerel, salmon, and other excellent fish, besides oysters of fine quality. Farming is becoming more important as the forests disappear, and mixed farming is very successful. Cattle-raising and dairying are increasing rapidly. Every kind of grain and root crop of Canada is produced, and two-thirds of the province is well suited for agriculture. The mines yield asbestos, gypsum, granite, and lime, the three latter of which are exported in large quantities. There are several large cotton mills and some large woollen mills, besides many smaller ones. Hardware, heavy machinery,



NEW BRUNSWICK

Scale
0 10 20 30 Miles
0 10 20 30 Kilometers

weather, boots and shoes, and other things are also manufactured.

Cities and Chief Towns.

ST. JOHN is the largest place and commercial centre, and includes Portland, Carleton and Fairville across the Grand Bay as suburbs. It has a railway

connection by the Intercolonial, the Canadian Pacific, and the Shore Line. St. John is the principal port of Canada in respect of shipping and ranks fourth in the Empire, along with London, Liverpool, and Glasgow. A fine suspension bridge spans the Narrows and also a cantilever bridge just above the Falls, which are reversed twice every day by the high tides that fill the gorge and turn the stream up the river so that vessels can pass over the buried cataract at the turn of the tide. *Moncton* is an important and growing railway centre on the *Petitcodiac*, a tidal river in which the extreme variation between high and low water is the greatest in the world. A sugar refinery, a cotton factory, and the head offices of the Intercolonial R. R. are located here. *Fredericton*, the capital, has a history reaching back to 1692, and is now a railroad centre, with four lines and a fine waterway to the Bay of Fundy. It is the headquarters of a large lumber trade, of cotton and leather manufacturing, of extensive canneries, and is the market for a rich agricultural section. A military school, a normal school, and a university are situated here, and also a Gothic cathedral and the

legislative buildings for the province. *Chatham* is the chief town on the gulf coast, with a very good harbor and large interests in lumbering, fishing, and ship-building. *Newcastle*, five miles up, is at the head of the deep water navigation on the Miramichi. It is also a ship-building centre, and does a large trade in lumber and fish. *Woodstock*, 75 miles above Fredericton, is at the head of navigation on the River St. John, with a rich farming country about it, and manufactures lumber. *Campbellton*, *Dalhousie*, *Milltown* and *St. Andrews* are thriving towns.

PRINCE EDWARD ISLAND.

What strait cuts off Prince Edward Island from the mainland? What island lies east of Prince Edward Island? What group lies to the northeast? What is the nearest point of New Brunswick? Describe the soil and climate of the Island. What is the latitude of the southern shore? What are the longitudes of the most northern and the most eastern points? Draw a map of the island and on it locate the capital, Summerside, and Georgetown.

Physical Features.

The strait of Northumberland divides the island from Nova Scotia and New Brunswick, but between Cape Traverse and Cape Tormentine the distance is only nine miles. A submarine telegraph is laid between these points, and communication with the mainland is maintained by lines of steamers that connect with the Intercolonial and Canadian Pacific Railways. A powerful



City Square and Normal School, Fredericton.



Legislative Buildings, Fredericton.

steamer specially constructed for navigating the straits in winter runs between Georgetown and Pictou, a distance of 30 miles. The island is about 150 miles long and its greatest width is 34 miles. The long coast line abounds with fine bays and inlets, and the surface is level or undulating, with no broken land and everywhere cultivable. The soil is rich red loam, extremely fertile, and the climate is more equable than that of the mainland.

Industries.

Farming is the chief occupation, and wheat, oats, barley, potatoes, and turnips are abundant crops. Fine horses, cattle, sheep, and hogs are largely produced. The fisheries are the best in the gulf, for the shallow waters near the island are the feeding grounds of immense shoals of delicious fish, and large quantities of cod, mackerel, oysters, lobsters, and herring are taken. There are no extensive factories, but the home market is supplied by local manufactures, such as starch, preserved meats, etc. A railroad traverses the middle of the island.

Chief Towns.

CHARLOTTETOWN, the capital, situated on the north side of a good harbor, has some fine buildings. It is the chief distributing centre and does a large trade. A meat-curing industry has recently been estab-



Legislative Buildings, Charlottetown.

lished. It is the seat of the provincial government, which also takes charge of many municipal affairs throughout the island. *Summerside* is the principal town in the west and has a capacious harbor. *Georgetown* is the chief place in the east. *Princeton* and *Souris* also have good harbors.

What means of communication has P. E. I. with the mainland? What are the places where the railroad ends? These towns are called the *termini*; one of them is called a *terminus*. What are the land products of this island? What products are got from the sea? What factory products are made? What is the size of the island? P. E. I. is the most densely peopled province in the Dominion; mention some reasons for this fact.

Point out parts of the western boundary of N. B. that are formed by straight lines. Where are Cumberland Basin and Cobequid Bay? What danger would there be in walking along the beach at these places when the tide was out? What is the most southern point of N. S.? The most eastern point of N. B.? Name the northern extremities of P. E. I. and C. B. Point out the great seaports of the Maritime Provinces. What produces the great fogs round the coasts of these provinces?



St. Dunstan's Cathedral.

Across what ocean do we trade with the West Indies? With Japan? Australia? Point out the great systems of internal communication by water routes. Point out the three great chains of lakes along three great valleys of drainage. Draw an outline map of the St. Lawrence and the five great lakes. Point out these large inland lakes that drain into the St. Lawrence: Nipigon, Nipissing, Simcoe, and St. John. Give the boundaries of the Gulf of St. Lawrence and mention the islands found there. Point out the three inlets to this gulf. Make a list of all the chief ports of the St. Lawrence and the Great Lakes. Include U. S. ports as well as Canadian.

THE ST. LAWRENCE PROVINCES.



Maisonneuve's Monument.

QUEBEC.

What strait is at the northern extremity of the province? What river forms part of the western boundary? What parts of the boundaries are made by straight lines? Name the two largest islands in the St. Lawrence. What islands are found at the confluence of the Ottawa and St. Lawrence? Sketch a map of Quebec. Mark on it the large rivers that empty into the St. Lawrence. Mark also the cities of Quebec. Describe the city of Quebec and give an outline of its history from 1608 to 1759, inclusive.

Physical Features.

QUEBEC is the largest province in the Dominion, Ontario being second. It stretches from the United States and New Brunswick in the south to Hudson Strait on the north, a distance of about 1,200 miles, and extends from Ontario eastward to the Gulf of St. Lawrence and Labrador over 1,000 miles. The southern portion is the most important, and is divided from southwest to northwest by the immense St. Lawrence, which has many large tributaries. On the north bank, the valley of the St. Lawrence, west of Montreal, is between 10 and 40 miles wide, and is flanked by the Laurentian range of low mountains, which close in about 10 miles below Quebec city almost to the edge of the river. This long triangular plain is level and fertile and contains the

mouths of a number of rivers, such as the great Ottawa, the St. Maurice, and the Saguenay. These streams rise on the Height of Land, which is the crest of the great Laurentian plateau that occupies the whole northern part of the province to Hudson Strait. They cut their way through the Laurentian range, often forming cataracts where they descend to the river plain, such as the Falls of Montmorency, near Quebec, and the Falls of Shawenegan on the St. Maurice, and they supply enormous water power. The Ottawa Valley is the continuation of this plain on the northeast side of that river and has numerous large streams that also come down from the Laurentian plateau, such as the Rouge, the Lièvre, the Gatineau, the Coulonge and the Dumoine, all of great importance to the lumber trade. The Ottawa, 615 miles long, carries a great volume of water and has several lake expansions, such as Lake of Two Mountains, Lake Chaudière, Lake des Chats, and Lake Timiskaming. It is navigable for long stretches



Legislative Buildings, Quebec.

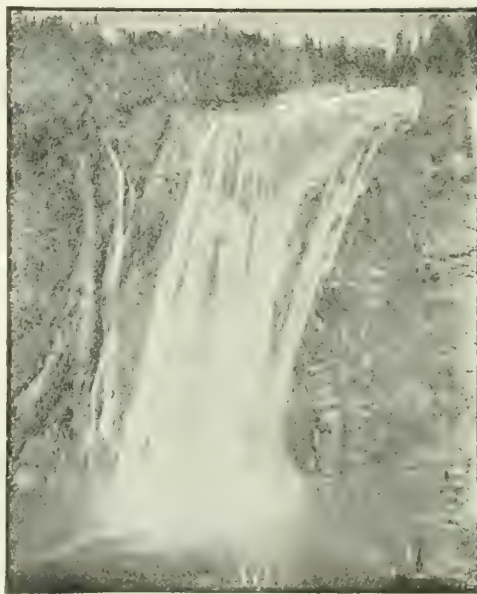
by means of a system of dams and canals that overcome the rapids, and it encloses the large islands Isle Jesu, Calumet, Allumette, and at Ottawa descends the Chaudière Falls.



Wharves, Montreal.

On the south side the valley of the St. Lawrence is limited by the Notre Dame range, which enters a little west of Lake Memphremagog in long rolling swells, and extends through the peninsula of Gaspé, where some peaks are 3,500 feet high. Below Quebec this range is within a few miles of the river, but east of Montreal the plain is from 40 to 50 miles wide. It is fertile and well watered by the Richelieu, which drains Lake Champlain, and by other rivers that sometimes rise in the high, undulating country on the borders of Maine, and pass the Notre Dame range by water-gaps, such as the St. Francis and the Chaudière. The southeastern part of the province, comprising twelve counties, is known as the Eastern Townships.

The mighty St. Lawrence is the greatest feature of Quebec. As it leaves Ontario it expands into Lakes St. Francis and St. Louis and below the mouth of the Richelieu into



Falls of Montmorenci.

Lake St. Peter. Above Montreal are the famous rapids Long Sault, Coteau Cedars, Cascades, and Lachine, which are overcome by a system of canals. Below Montreal the river is navigable by the largest ocean steamers, its waters are everywhere clear and blue, and the scenery along the shores is very remarkable for its great natural beauty. From Quebec it gradually widens into an immense estuary, which is over 15 miles wide at the Gulf of St. Lawrence. The islands are numerous—Anticost

near the mouth, is 14 miles long; the island of Orleans, near Quebec, is 20 miles long, and Montreal Island 3 miles long.

Climate and Products.

The climate of Quebec is one of the most healthful in the world. The summer heat in the St. Lawrence valley often exceeds 80° so that wheat, Indian corn, grapes, and tomatoes come to perfection. Tobacco grows in several parts and yields large crops; apples are largely exported, and plums of fine flavor are grown in many counties. The winters are decidedly cold and the temperature



Lachine Rapids.

often sinks to 10° or 20° below zero; but the cold is not unpleasant. The snow falls deep and lasts from December till April, forming excellent roads and leaving the ground in prime condition for rapid spring growth; so that spring wheat, potatoes, peas, beans, oats, hay, turnips, mangels, and garden vegetables are cultivated successfully in nearly all the settled parts of the province. The pasturage lands are of special excellence. Butter and cheese are produced in considerable quantities from the factories which are numerous in Quebec, and maple sugar is exported to Ontario and the United States.

Industries.

Agriculture is the occupation of the greater part of the people and oats and hay are the most valuable crops. The lumber trade is the most important commercially and employs a large number of people, especially in winter. The timber is very valuable and is chiefly obtained on the tributaries of the Ottawa, and in the region about Lake St. John, north of Quebec; but almost every district still contains supplies of timber and the whole Laurentian plateau is covered with forest, all of which is useful either for wood or for paper pulp.

The fisheries of the St. Lawrence and the Gulf are extensive and

employ thousands of men, and the product is worth from one to two millions a year.

The extraordinary supply of water power makes up somewhat for the absence of coal mines, and places Quebec next to Ontario in respect to the value of its manufactures. Saw mills and flour mills abound, and there are large cotton mills, paper mills, and sugar refineries. Leather and boots and shoes are largely manufactured, all kinds of hardware and iron work, furs, hats, india rubber, and wood-pulp are also made in considerable quantities. The total value of the manufactured products is steadily growing year by year.

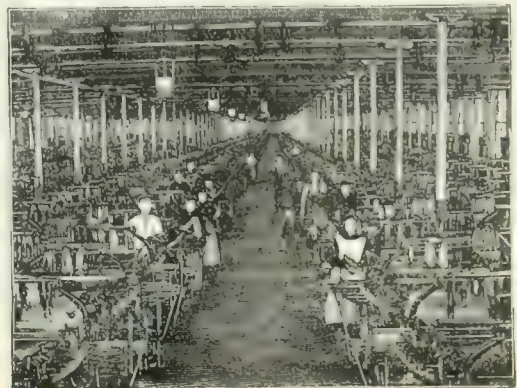


Notre Dame Cathedral, Montreal.

Mining is carried on but not extensively. The most important minerals in their order are asbestos, copper, and mica. Slate, granite, and iron ore of good quality are also found. The asbestos deposits near Thetford, in the County of Megantic, are in some places six inches thick, and the total value of the product is about half a million dollars a year. Copper ore is found at many places in the Eastern Townships, but the mines at Capelton are the principal ones that are now worked. Mica, which



Cotton Mill.



Interior of Cotton Mill.

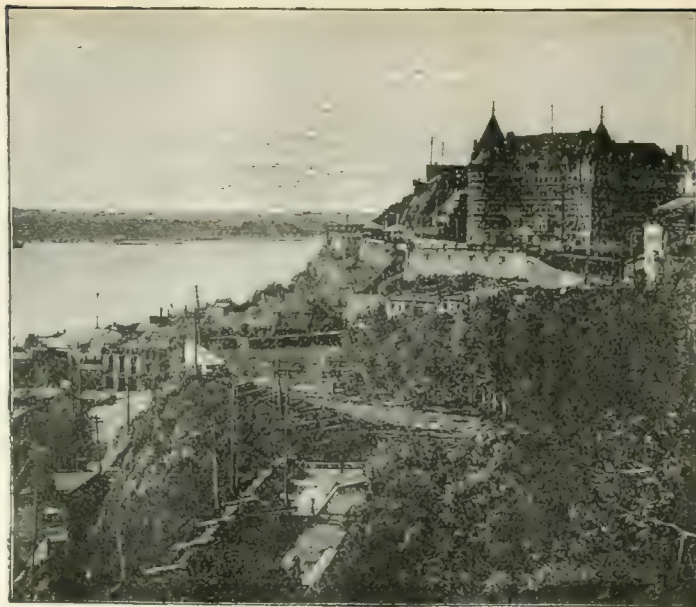
has acquired a new value for electrical purposes, is found in excellent quality along the Lièvre and the Gatineau, and in the same locality are found rich deposits of phosphate of lime.

Near Ottawa are beds of graphite or black lead equal to the best in the world, and on the Gaspé peninsula petroleum has been found.

The pulp-wood industry was unknown a few years ago, but in ten years has sprung into first-class commercial importance. Quebec has extraordinary facilities for making and shipping pulp. Spruce grows everywhere in the north of the province, almost as far north as Hudson Strait, and the unlimited water power and the easy means of rafting on the great rivers make it certain that Quebec will in a few years export vast quantities of pulp to the markets beyond the sea.

Cities and Towns.

MONTREAL is the largest city in Canada and the largest commercial centre. It was founded in 1641 by Maisonneuve and was named Ville Marie in 1642, and extends for several miles along the east shore of Montreal Island. It has a fine harbor at the head of navigation for the larger ocean-going ves-



City of Quebec.

sel, and is one of the chief railway centres of the Dominion. Its situation has enabled it to command the trade of the North West, and it is the chief distributing centre for the imports of Canada. It has more manufacturing factories than any other city in the Dominion—cotton mills, rolling mills, sugar refineries, tobacco factories, boot and shoe factories, rubber factories, and many others, representing almost every branch of industry. Its commercial supremacy, its vast wealth, its unrivalled situation, its picturesque mountain and fine park, its elegant public buildings, all combine to make it the most important city in Canada. The Victoria Jubilee bridge, 65 feet wide, and weighing about 22,000 tons, crosses the St. Lawrence here with 25 spans and a total length of 6,592 feet. *Quebec*—The provincial capital was founded in 1608 by Champlain at Cape

Diamond, which marks the head of the St. Lawrence estuary. It is the oldest and the most picturesque city in America, and holds the most commanding situation. The fortifications stand 333 feet above the river, the harbor is magnificent, and Quebec ranks as the third commercial city of Canada. It is the



Basilica of Sainte Anne de Beaufort.

great timber market and the headquarters of the ocean lumber trade, and has extensive boot and shoe factories, besides ship-building and other industries. Railroads connect it with Lake St. John, Montreal, and Ottawa. The historic associations of Quebec would fill a volume. Six times it has been assaulted by hostile forces, and has been the scene of many stirring events. *Levis*, on the south side of the river, has a large graving dock. From it the railroads radiate to southern Quebec, the Maritime Provinces, and the United States. *Hull*, a thriving city on the north side of the Ottawa River, opposite Ottawa, is an important lumbering and manufacturing centre. The water power of the Chaudière Falls is utilized to work the extensive saw mills that manufacture the timber brought down the Ottawa. Matches, wooden ware, paper-pulp and paper are made on a large scale. *Sherbrooke*, at the mouth of the Magog River, where it joins the St. Francis, has splendid water power and is the metropolis of the Eastern Townships. The railway connections with Montreal, Quebec, and Portland are good. The manufacture of cotton and woollen goods and hardware is briskly carried on. *St. Hyacinthe*, thirty miles east of Montreal, on the Yamaska river, manufactures leather, woollen goods, and machinery, and is the seat of the Provincial Experimental Dairy School. *Three Rivers*, near the triple mouth of the St. Maurice, does a large business in lumber and iron. The latter is smelted from bog iron ore a few miles up the river and about fifty tons a day of excellent char-

coal iron are turned out. *Valleyfield*, on the Beauharnois Canal at the foot of the Coteau Rapids, has unlimited water power for its cotton-mill, paper mill, and other factories. It is an important manufacturing centre. *Sorel* is at the mouth of the Richelieu and deals in iron manufactures. It has an excellent harbor for sheltering vessels in winter, and is a very old town on the ancient war-path of the Iroquois. Up the river there is a continuous water passage by Chambly Canal and Lake Champlain to Hudson River. At *Lachine* and *Chambly* extensive water power is converted into electricity and used in

Montreal for light and motor power. Similarly, the Montmorency Falls near Quebec supply the city with light and power. But the greatest power yet developed is that of the Shawenegan Falls on the St. Maurice, where the motive power is used to operate extensive pulp works.

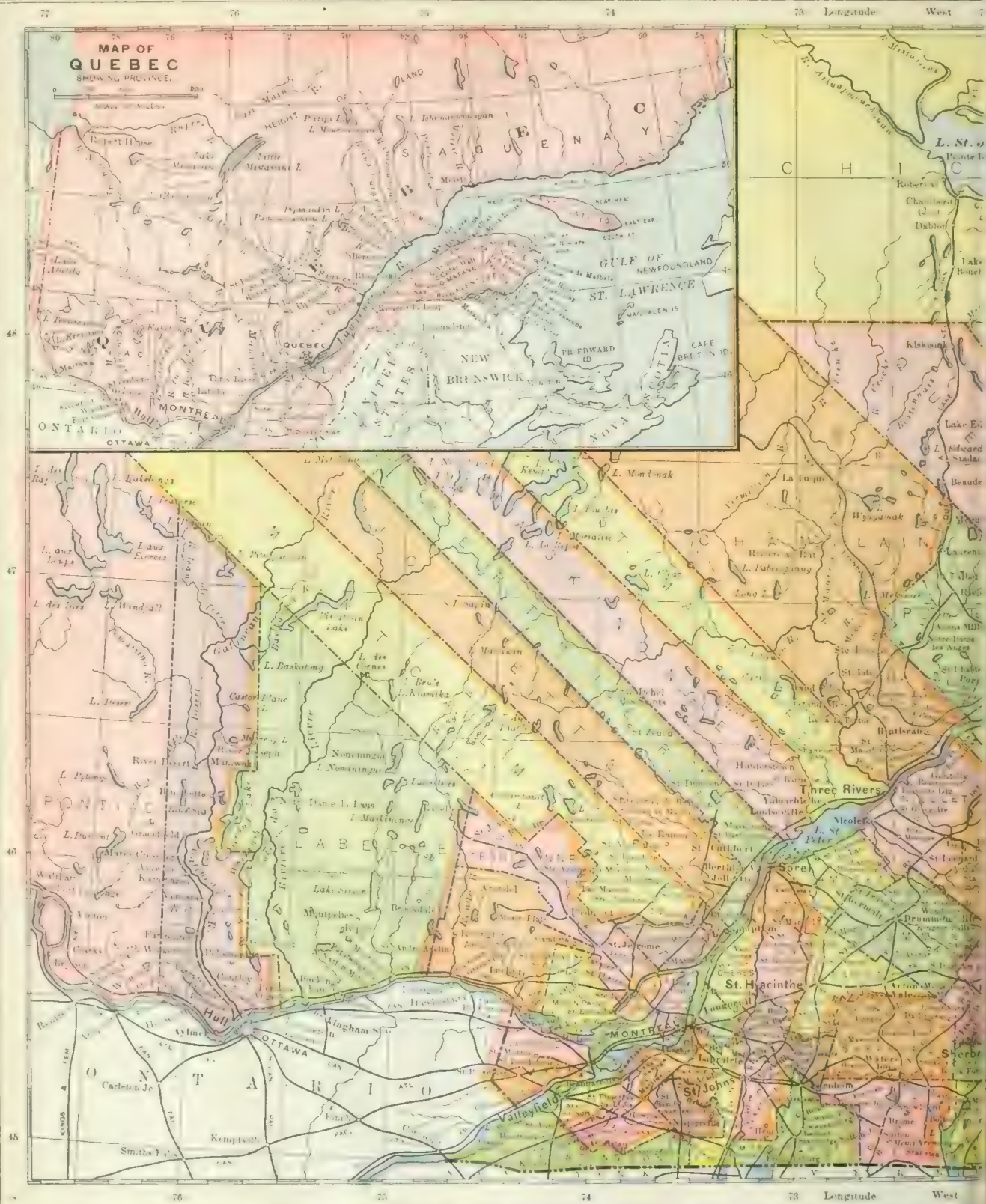


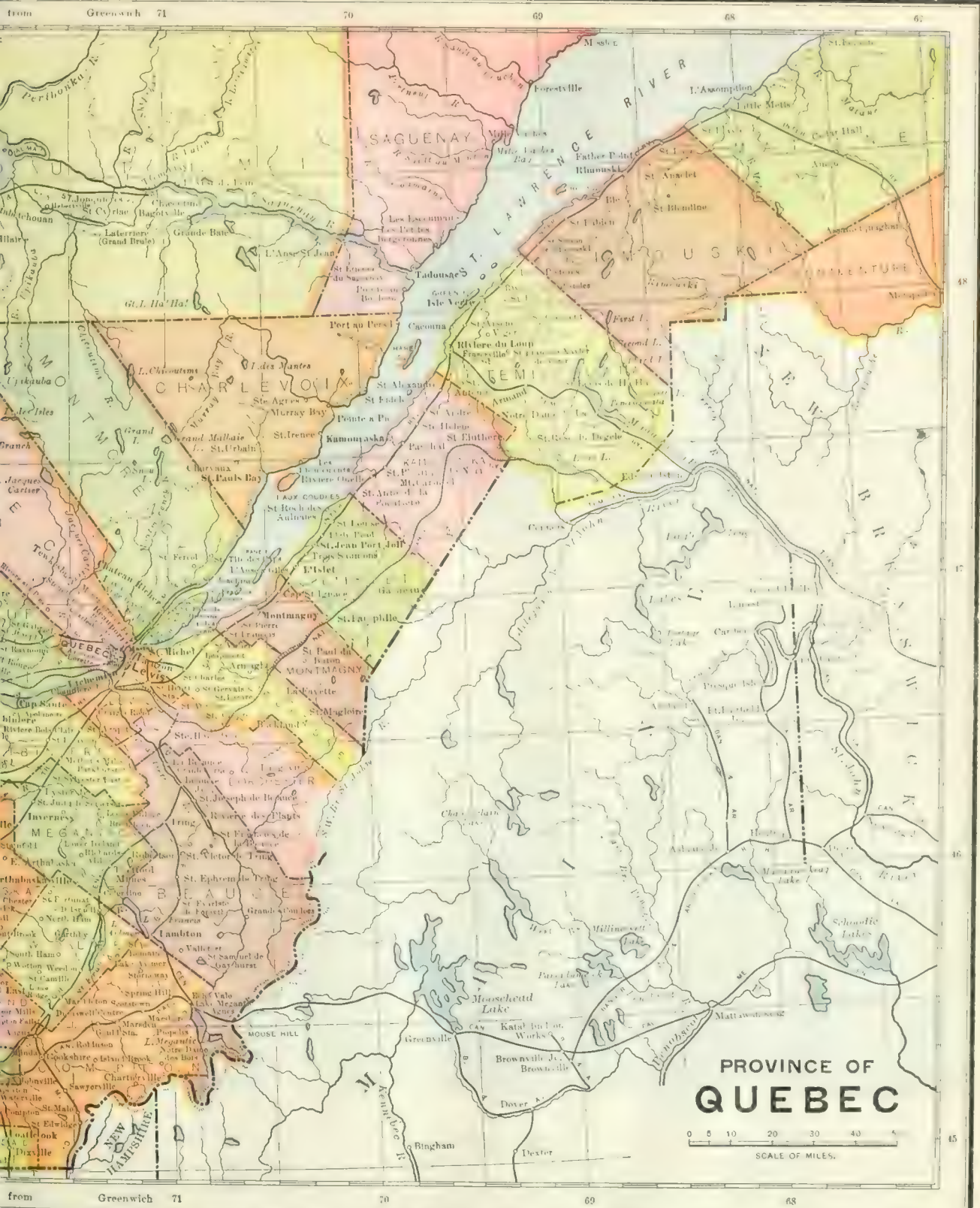
McGill University, Montreal.

REVIEW EXERCISE

Explain shortly why most of the people of Quebec are of French descent. Why is Quebec likely to become a great manufacturing province? Trace out on the map the railway system of Quebec. Find the following lines: Intercolonial, Quebec Central, the Grand Trunk, Quebec and Lake St. John, the different sections of the Canadian Pacific, the Témiscouata, Bay of Chaleur. What has made Montreal the greatest commercial city in Canada? Point out on the map the cities and towns of Quebec. Where are minerals of value found in the province? Name the most important. Draw a map of the St. Lawrence and its branches; mark the chief towns and cities. Describe the city of Quebec. Name all the rivers connected with Lake St. John. Point out on the map the lumbering and the agricultural regions of the province. Mention a few of the larger falls or cataracts on the rivers and tell the uses that can be made of them. Where are the largest pulp mills, paper mills, cotton mills, and iron manufactories? Draw a map of the Ottawa river on a sheet of foolscap and mark the lake expansions and the towns.

MAP OF
QUEBEC
SHOWING PROVINCE.





PROVINCE OF
QUEBEC

0 5 10 20 30 40 50
SCALE OF MILES.

ONTARIO.

What province has a greater area than Ontario? Mention all the large bodies of water on the boundaries of the province. Name all the rivers along the boundaries. Which two are the largest? Where are Lakes Simcoe, Nipissing, Nipigon? Point out Lake of the Woods, and Lake St. Joseph. How do vessels pass from Lake Ontario to Lake Erie? How are the rapids of the St. Mary, the Ottawa, and the St. Lawrence overcome? Make a list of the lake ports of Ontario. Which of these are cities? Draw a map of Lake Ontario. Mark the principal ports, harbors, and river-mouths on both sides. Do the same for Lake Erie, Lake Huron, and Lake Superior. Where are Manitoulin Island, Muskoka Lakes, and the Bay of Quinte?

Position and Extent.

This province is next in size to Quebec, and extends westward from Quebec to Manitoba over 1,000 miles, and as far north as Hudson Bay, which is about 1000 miles north of Lake Erie. The St. Lawrence and the Great Lakes form the boundary on the south and southwest. A lake and riversystem completes the boundary of the province along Minnesota. The inland sea, Hudson Bay, forms the northern boundary. That portion lying south of Lake Huron and the Georgian Bay is called the Ontario Peninsula.

Physical Features.

The St. Lawrence plain extends into Ontario, and occupies the triangle between the Ottawa and the St. Lawrence. The Laurentian plateau



University College.

occupies a great part of the north and is mostly covered with valuable timber. Its crest is lower than in Quebec and contains large tracts of good land, but most of it is rocky and unfit for farm-

ing. Its southern edge is bounded roughly by a line from the Thousand Islands to the mouth of Severn River. North of Lake Superior this edge is only a few miles from the shore, and towards Manitoba it turns to the northwest at a lower elevation. North of this height of



Legislative Buildings, Toronto.

land the country drains into James Bay and is a flat district covered with timber fit for pulpwood. The district south of the plateau and east of Lake Huron is divided into two plains by the ridge that enters at Niagara and reaches to the Bruce Peninsula. Of these the western plain is generally much the higher and contains the most fertile land in the province.

Drainage.

Into Hudson Bay flow the Abitibi, Moose, and Albany; the latter 440 miles long. The English and the Rainy Rivers flow into Lake Winnipeg by the Winnipeg River. Into Lake Superior flow Pigeon River, the Kaministiquia, Nipigon, and the Pic. The Georgian Bay receives the Thessalon, Spanish, French, Muskoka, Magnetawan, and Severn. The Thames and the Grand are the largest rivers in the western peninsula. Emptying into the Bay of Quinte are the Moira and the Trent which latter is navigable for long stretches and drains a series of lakes. The Ontario branches of the Ottawa are the Montreal, Mattawa,

Petawawa, Bonnechère, Madawaska, Mississippi, and Rideau. They are generally shorter and smaller than the rivers of Quebec, but they supply enormous water power. The connecting links of the Great Lakes system are Lake St. Clair and four large rivers—Niagara, Detroit, St. Clair, and St. Mary. The falls on the first-mentioned river and the rapids on the last afford valuable water power but interrupt navigation. They are avoided by the Welland Canal, 27 miles long, which has cost about twenty-four million dollars, and the Sault Ste. Marie Canal, a mile long, with a basin 60 feet wide, 20 feet deep, 900 feet long. It has cost about four million dollars, and on it are built the largest pulp works in the world. There are several considerable lakes distributed between Lake Ontario and Manitoba—Rice Lake and the lake system of the Trent valley, Lakes Simcoe, Muskoka, Nipissing 50, Abitibi 45, Nipigon 70, Rainy Lake 50, Lake of the Woods 70, Lonely Lake 100 miles long.

Industries.

Agriculture stands first in importance, and the chief products are wheat, oats, barley, hay,

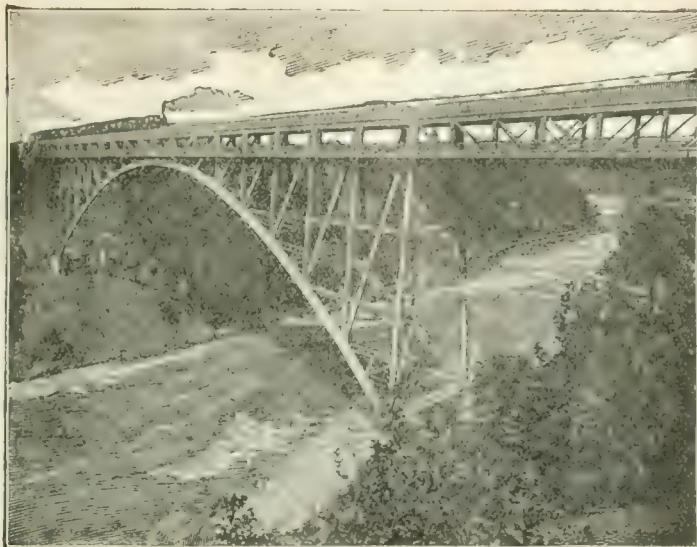
Indian corn, and root crops. Cattle, horses, hogs, butter, and cheese are produced in large quantities, and a good deal of fruit is exported,

particularly from the Niagara and Lake Erie sections. Lumbering in the northern districts is carried on in all its branches, and employs many hands in turning white pine and spruce into lumber and pulp-wood. Manufacturing comes third in importance. In nearly all the towns of southern Ontario manufactures of vari-

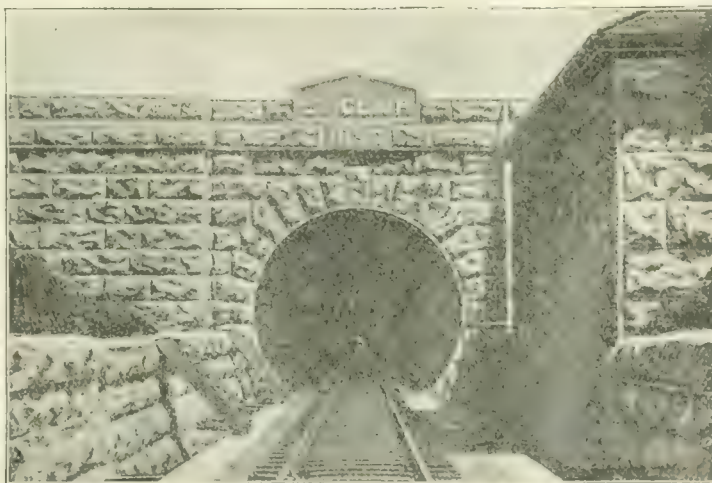
ous kinds are found, favored as they are with numerous lines of railway. Among them, machinery, cotton and woollen goods, furniture, organs and pianos, canned goods, boots and shoes, pork, tobacco, wood-pulp, and paper may

be mentioned. Mining is rapidly becoming a great industry, petroleum, nickel and copper being the most important minerals. Petroleum and natural gas are found in the Lake Erie section, and salt is abundant in Huron and Lambton counties. Silver is found near Cobalt, cop-

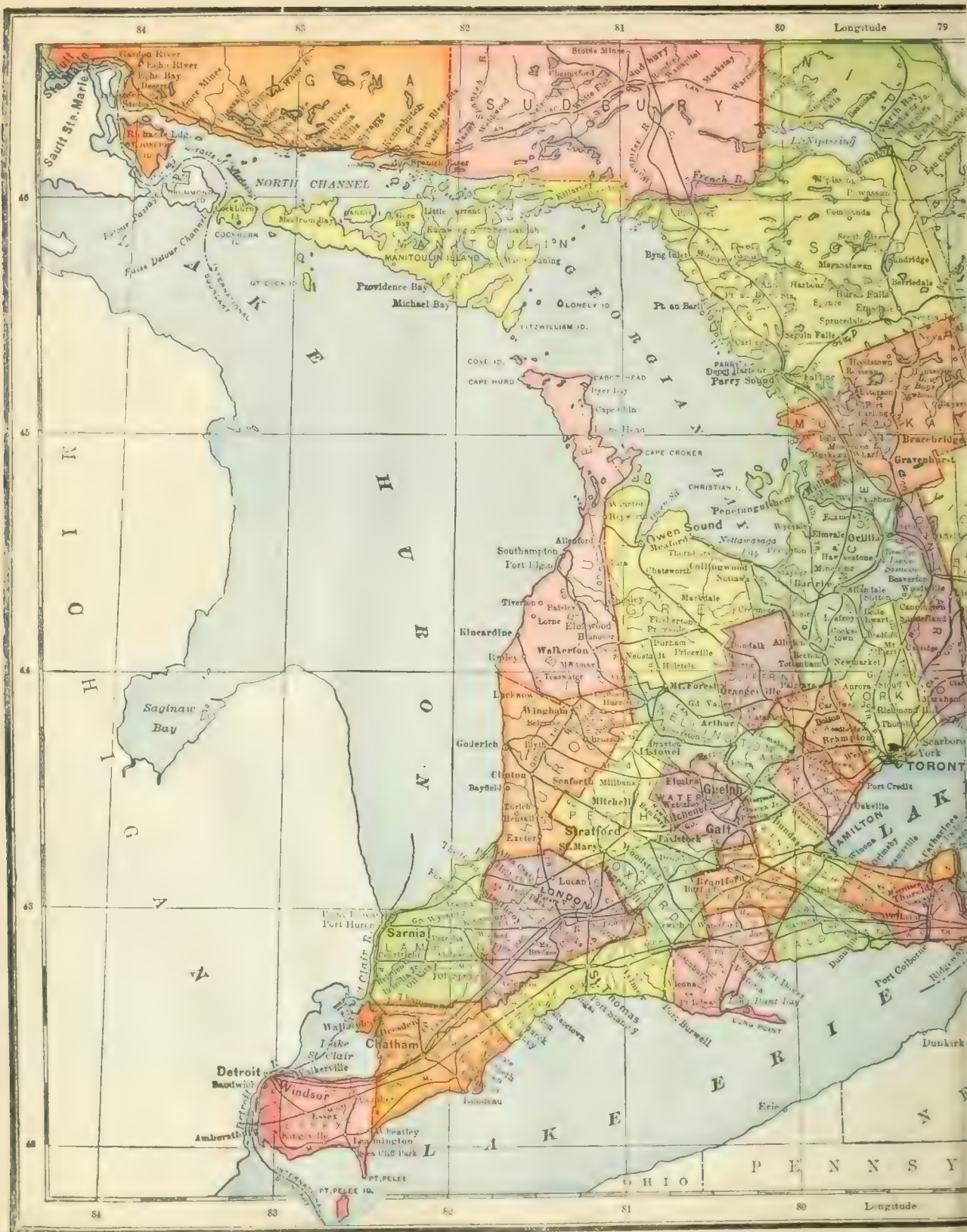
per and nickel at Sudbury, gypsum along the Grand River, phosphate of lime north of the St. Lawrence, and iron ores in numerous places. In the Lake of the Woods and the Rainy River



Grand Trunk Steel Arch Bridge across the Niagara.



St. Clair Tunnel, through which the Grand Trunk Railway passes under the St. Clair River.





from 78 Greenwich 77 76 75 74 73

Q U E B E C

MONTREAL

OTTAWA

Brockville

WESTERN PART OF
ONTARIO

HUDSON BAY

PATRICIA

THUNDER BAY

RAINIER RIVER

ALGOMA

PROVINCE OF
ONTARIO

0 5 10 20 30 40 50 60 70 80
SCALE OF MILES

W. GAGE COMPANY, TORONTO.

A N I A

from 78 Greenwich 77 76 75 74 73

districts deposits of gold have been discovered, but the oldest mines are in Hastings County. The fisheries are equal in value to those of Quebec and employ over 3,000 men on the inland waters.

Cities and Towns.

TORONTO is the largest city and capital of Ontario. It is next to Montreal in wealth and population. It has a capacious, sheltered harbor, with wide streets, handsome buildings, and a multitude of manufacturing interests of the most varied kind. It is surrounded by a rich agricultural country and has a network of railways radiating to all parts of Canada and the United States. *Ottawa*, the federal capital of Canada, has a magnificent water power which is employed in the large saw mills,



Canal at Sault Ste. Marie.

flour mills, woollen mills, and cement mills. The Parliament Buildings cost about five million dollars, and overlook the Ottawa River. *Hamilton*, on Burlington Bay, has a very fine situation and ranks as the third city of the province. It has a smelting furnace, a large cotton mill, and a variety of manufactures. *London*, the largest place in the western peninsula, is a chief distributing point. It contains petroleum refineries and numerous factories. *Kingston*, the oldest city in the



City Hall, Toronto.

province, is at the head of the St. Lawrence, where much grain is trans-shipped to barges. Locomotives and cars are the chief manufactures. *Brantford*, *Peterborough*, *Windsor*, *Fort William*, *Guelph*, *Berlin*, *St. Thomas*, *Stratford*, *St. Catharines*, *Port Arthur*, *Chatham*, *Sault Ste. Marie*, *Belleville*, *Woodstock*, *Niagara Falls* and *Galt* are smaller cities flourishing usually in rich districts and are growing rapidly. The largest towns in Ontario are *Owen Sound*, *Brockville* and *Sarnia*. Most of these have factories and enjoy a large local trade. *Barrie*, *Cobalt*, *Cobourg*, *Collingwood*, *Cornwall*, *Kenora*, *Lindsay*, *North Bay*, *Oshawa*, *Orillia*, *Pembroke*, *Port Hope*, *Smith's Falls* and *Welland* are growing rapidly into important centres of industry.

Sketch North America; show Canada and locate its principal highlands. What province is filled with mountains and plateaus? What provinces are chiefly prairie? Draw a curved line to show the direction of the Height of Land. Name the provinces through which this highland passes. Find the Cobequid Mountains.



Oil Well at Petrolia.

THE PRAIRIE REGION.

MANITOBA.

What province lies east of Manitoba? What district is on the north? What province is on the west? What country lies south of Manitoba? Name the largest lakes. What rivers empty into Lake Winnipeg? What is its outlet to Hudson Bay? Make a map of Manitoba on a larger scale. Put on the map the rivers, railways, and chief towns. Mark these places:—Winnipeg, Portage la Prairie, Brandon, Emerson, Rapid City, Selkirk, Carberry, Minnedosa, Morris, Morden, Neepawa, Carman, Virden, and Souris. Find the boundaries of Manitoba. Look at the direction of the rivers, and then point out the lowest side and the highest side of Manitoba.

This province lies nearly halfway between the eastern and western extremities of the Dominion. It is near the centre of the continent. The western boundary is formed by the meridian $101^{\circ} 30'$; the northern by the 60th parallel of latitude. Its area is a little more than that of a square of which the side is 500 miles. Find the states and provinces bordering on this province. Describe the direction of the boundary line between Ontario and Manitoba.

Physical Features.

The northeastern corner as far as Lake Winnipeg belongs to the Laurentian plateau and contains more or less forest, but the rest of the province is part of the great plain which stretches to the Rocky Mountains. This plain is lowest near Winnipeg and the Red River valley and steadily rises westward. About Lakes Winnipeg and Manitoba the elevation is only 700 feet above sea level, but near the Rocky Mountains the elevation is from 3,000

to 4,000 feet. There are two distinct rises on the way westward, dividing the plain into three levels or *stéppes*. The first is marked by a range of hills running northwest near Carberry and forming the western limit of the Red River country. The second ridge passes northwest near Moosejaw and forms the edge of the third

steppe which slopes upward to the foot of the mountains. The south of Manitoba is higher than the north, and the plain slopes northward about a foot in the mile. At the south the plain drained by Red River is only about fifty miles wide but expands to

over 200 miles at the north.

The principal rivers are Red River and Assiniboine, both navigable for long distances. The lakes cover more than 9,000 square miles; Lake Winnipeg, 250 miles long, receives the waters of the Saskatchewan, Red, and Winnipeg Rivers and is drained by the Nelson River into Hudson Bay.

The other large lakes are Winnipegosis and Manitoba; smaller ones are Dauphin and St. Martin. All these lakes and a multitude of smaller ones teem with delicious fish and supply a source of wealth to the settlers.



Legislative Buildings, Winnipeg.



Harvesting in Manitoba

Products and Industries.

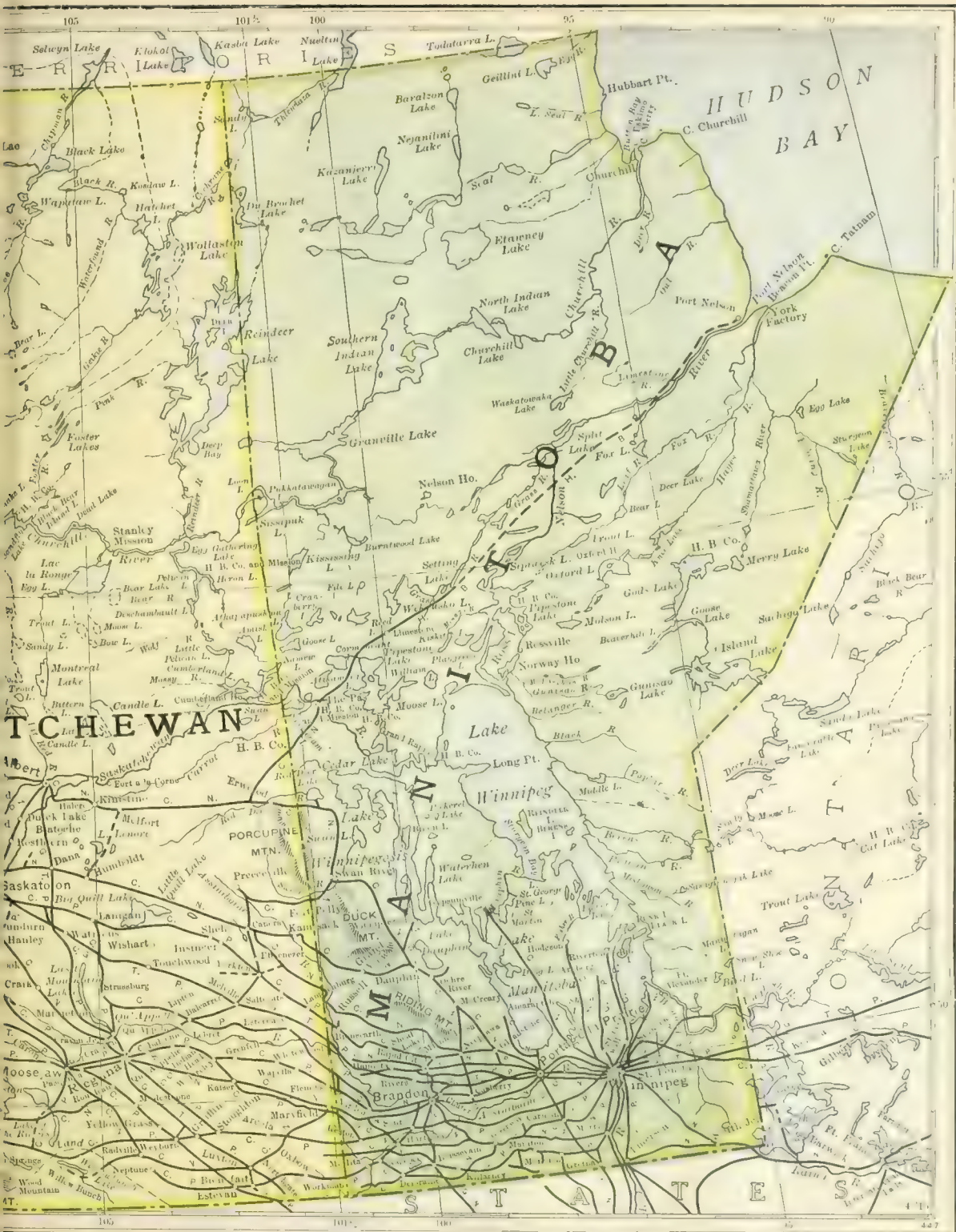
The soil is nearly all fertile and easily worked, and the climate is such that wheat comes to the greatest perfection. The winters

MANITOBA SASKATCHEWAN and ALBERTA.

SCALE:
195 Miles to 1 inch.

- RAILROADS.
- C. P. = CANADIAN PACIFIC
 - C. N. = CANADIAN NORTHERN
 - G. T. P. = GRAND TRUNK PACIFIC
 - N. P. = NORTHERN PACIFIC
 - E. D. & B. C. = EDMONTON DUNVEGAN & BRITISH COLUMBIA
 - H. B. = HUDSON BAY
 - G. N. = GREAT NORTHERN





are clear, cold, and dry with light snowfall. Occasionally the temperature drops to 30° or 40° below zero, but on the whole the winter months are very pleasant. Spring comes early in March,



City of Winnipeg, Man.

and the summer has hot days, cool nights, and just sufficient rainfall for crops of wheat, oats, barley, potatoes, hay, flax, and hemp.

The great occupation is agriculture. The raising of horses and cattle and the production of butter and cheese are also carried on.

Nearly all manufactured articles are imported. What manufactures exist, are mainly connected with the agricultural interests of the country. There are large flour mills and machine shops manufacturing farming implements and wire-fencing at Winnipeg and Brandon.

Chief Towns.

WINNIPEG has grown up rapidly since 1871, when it had but 241 inhabitants. It is the commercial metropolis of the North-West, the great railway centre and chief distributing point, and has many handsome buildings. *Brandon* and *Portage la Prairie* are typical towns in the midst of fine farming districts and are growing at a surprising rate. *Selkirk*, *St. Boniface*, and *Morden* are similar to many other smaller places where grain is shipped and imported goods are distributed.

Trace on the map the river system of Manitoba. Trace on the map the railway system. Locate the cities and towns mentioned in the text (page 177). Trace on the map the various routes by which grain and cattle may be sent from the North-West to Europe. What advantage to the North-West would be gained by the building of a railway from Winnipeg to Hudson Bay?

SASKATCHEWAN AND ALBERTA.

Which provinces border on Manitoba? Which border on Saskatchewan? Between what provinces does Alberta lie? Draw a map of these two provinces on a large scale. Mark on your map the following rivers:—North and South Saskatchewan, and the Saskatchewan, the Athabaska, McLeod, Pembina, Bow, Red Deer, Battle and Beaver. Mark also the Canadian Pacific Railway and insert the names of the leading towns along the line. Trace the Grand Trunk Pacific from Winnipeg to Prince Rupert.

These two provinces extend west of Manitoba to the mountains and have much the same general character of surface. They form the basin of the Saskatchewan, which has two large branches and over 1,000 miles of navigable water reaching to the foothills of the mountains toward which the whole plain rises, as already explained. The eastern parts of Saskatchewan have the climate and products of Manitoba, but the western portion of Saskatchewan and the whole of Alberta have a much smaller rainfall and present a very dry appearance. The cold of winter is often moderated by the west winds which, in descending from the



White Herdsmen called Cowboys.



Loading Cattle Cars.

mountains, give out much heat. These are known as Chinook winds. In both Saskatchewan and Alberta grain raising is the chief occupation. Saskatchewan is becoming one of the greatest wheat-producing sections of America. In Alberta wheat is grown from

the international boundary to the Peace River. Winter wheat, oats, barley, flax, and all kinds of roots flourish.

The principal cities of Saskatchewan are REGINA, the capital, *Saskatoon*, *Moosejaw*, *Prince Albert*, and *North Battleford*. Of Alberta, EDMONTON, the capital; *Calgary*, *Lethbridge*, *Medicine Hat*, and *Wetaskiwin*.

Coal is found in large quantities throughout Alberta, and mines are worked at

Lethbridge, Canmore, Anthracite, Edmonton, and Estevan. In southern Alberta extensive irrigation works are employed to water the dry plains from the mountain streams, with great success.



Mounted Police.

THE MOUNTAIN REGION.

BRITISH COLUMBIA.

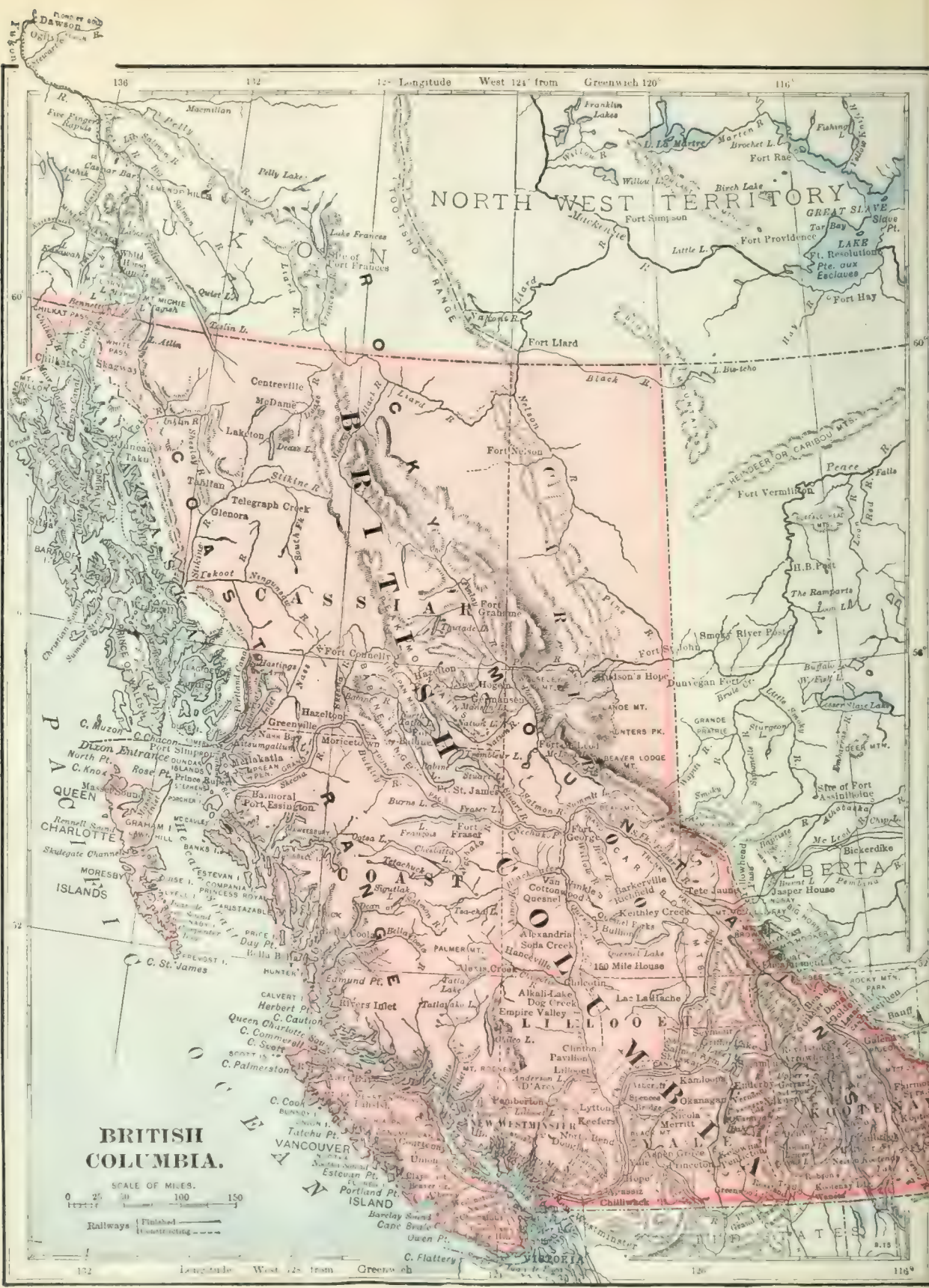
In what direction do the rivers of British Columbia flow? Why? Name three of the largest rivers. Are there any lakes? Name them. Draw a map and locate on it the chief rivers and the leading cities and towns. What mountain range separates British Columbia from Alberta? Name one of the highest peaks in this range. What other mountain ranges are in the province? What large island forms part of the province? How is it separated from the mainland of the province? How from the United States? What other islands lie along the Pacific Coast?

This is the third province in size (Which are the two largest?), and measures 900 miles long by 425 miles broad. It reaches from the 49th to the 60th parallel of latitude, and from the Rocky Mountains to the Pacific. It is a country of mountains, which in the southern part extend over 400 miles in width and are composed of parallel ranges with long valleys between. The Rocky Mountains are about 60 miles wide at the south and

20 miles towards the north of the province, and some of their peaks reach more than 10,000 feet in height. The coast range is about 100 miles wide and has summits 7,000 to 9,000 feet high. The country lying between these two ranges is called the Interior plateau and includes several parallel ranges, such as the Selkirk, Purcell,



Victoria, B.C.



BRITISH COLUMBIA.

SCALE OF MILES.
0 25 50 100 150
Railways ————
Unsurveyed ————



Salmon Fishing, Columbia River.

long, and has a general elevation of 3,500 feet. Along the coast lies a chain of continental islands with mountain peaks from 4,000 to 7,000 feet high, and the mainland is indented with long, deep bays, bordered by lofty, rugged mountain walls often backed by glaciers and snow-fields towards the north.

The Columbia and the Fraser, the largest rivers flowing southward, have very crooked courses. The Naas, the Skeena, and the Stikkeen empty into the Pacific, and the Liard and its tributaries drain into the Mackenzie, while the upper waters of the Yukon go northwest through Yukon territory. In most of the river basins there are long stretches of fine agricultural and pastoral lands, and in the south some of these valleys produce melons, grapes, and Indian corn, which do not come to perfection elsewhere in the province.

Mining is the great industry, especially coal, copper, and gold mining. In 1912 the value of the output of these three exceeded twenty-three million dollars. Vancouver Island and Crowsnest Pass are the centres of the coal industry of the province.

The thousands of inland lakes and streams are full of the finest fish. As yet the fishing industry is only in its infancy, but already British Columbia produces more than one-third of the whole fishing yield of Canada. A number of hatcheries have been established by the Dominion and local governments. The salmon fisheries of the coast are the richest in the world.

Columbia, and Cariboo Mountains. This district is about 100 miles wide and 600 miles

British Columbia has the largest compact area of marketable timber on this Continent. As far north as Alaska the coast is heavily timbered, the forest line following the shore and river valleys and fringing the mountain sides.

The Douglas fir grows from 200 to 300 feet high and 8 or 10 feet thick. The output of lumber is increasing very rapidly and there are many sawmills, shingle mills, planing mills, and sash and door factories.

Chief Cities and Towns.

VICTORIA, the capital, a place of great natural beauty on the southeast of Vancouver, has fine buildings. It has a large ocean and coast trade. *Vancouver*, on Burrard Inlet, is the largest city in the province. It is the terminus of the C.P.R. and of the Pacific steamship lines, and is commercially important. *South Vancouver*, *North Vancouver*, *New Westminster*, *Nanaimo*, *Nelson*, *Rossland*, and *Prince Rupert* are rising places. Many mining centres are rapidly growing into new towns, especially in the southern part.

Trace the courses of the rivers and point out the inlets and islands. Trace on the map the ship-passage along the coast. Account for the peculiarities of the climate of British Columbia. Give an account of the natural products of the province. Point out the coal and iron districts. Trace on the map the course of the Canadian Pacific Railway; also of the Grand Trunk Pacific Railway.



Lumbering.

THE NORTHERN TERRITORIES.

YUKON AND THE NORTH-WEST TERRITORIES.

Trace out the boundaries of each territory on the map, page 38. What territory borders on Hudson Bay? Where are the Nelson, Churchill, Great Whale, Albany, Eastmain, and Big rivers? Which are the largest lakes and rivers of the North-West Territory? Name a few of the islands and straits in the North-West Territory. Name some of the islands in Hudson Bay. Where are Port Nelson and Port Churchill?

Yukon extends from British Columbia on the south to the Arctic Ocean on the north, and from the North-West Territory on the east to Alaska on the west. It has become celebrated the world over for its famous gold mines that have attracted thousands of pioneers. The output has reached between twenty and thirty millions a year taken from the creeks flowing into the Yukon River. Timber sufficient for fuel and mining is plentiful. The summer heat is remarkable for such a high latitude, but the winter climate has Arctic severity, and the ground is frozen deep. In general the surface is mountainous.

These vast territories are only partially explored, but the first is important.

It is a country of rolling hills, mountain ranges and navigable rivers. Lying so far north, the summer season is short and the climate is subject to extremes of heat and cold. Garden vegetables grow to a large size at Dawson. The great value of Yukon lies in the minerals, principally gold, which was found in great quantities, and is still found in considerable quantities. Copper, iron, and coal are also found there.

Down the western part of the North-West Territory flows the Mackenzie River. It

drains three great lakes, namely, Athabaska, Great Slave, and Great Bear, which lie on the east side of the valley on the borders of the Laurentian plateau. The river valley is



Washing Gold on the Klondike.

well wooded and contains much good land. East of these great lakes lies a treeless district which occupies the whole of the country northwest of Hudson Bay, and is often called "The Barren Lands." It is full of lakes and streams that teem with fish, and is the home of the caribou, the moose, the musk ox, and countless flocks of water fowl.

The inland portion of the North-West Territory is comparatively unknown. The present resources of the country consist mainly of the furs which are collected by the Hudson's Bay Company from the Indians and white hunters for export to England.

Trace on the map the boundaries of the territories. Trace on the map the courses of three great rivers. Point out the large lakes. Describe the "Valley of the Mackenzie." Point out on the map the various mineral regions of the territories.

NEWFOUNDLAND.



and is separated from Labrador by only twelve miles of shallow water at the Strait of Belle Isle. It measures about 325 by 310 miles. The western side is the higher, and the general slope is towards the northeast and east. The interior is imperfectly explored, but contains some wooded land, some stretches of "barrens," and considerable areas of pasture and arable land. The surface is varied with many streams, lakes, and marshes. The soil is in general cold and wet and not well fitted for agriculture. The coast line is extremely irregular, and includes the northern peninsula and also those of Avalon and Burin in the south, while round the coast are countless harbors and coves. The climate of the west and north is rather harsh, but on the northeast and south, at some distance from the sea, wheat, barley, oats, and potatoes are grown.

Large quantities of ice are

This large island is the only part of British America that is not included in the Dominion. It is more than one-third larger than Ireland, from which it is only 1,700 miles distant, and is just twice the size of Nova Scotia. It forms the eastern barrier of the Gulf of St. Lawrence,

brought down by the Arctic current, and a little southeast from Newfoundland these meet the warm Gulf Stream from the tropics. Thus are produced dense and frequent fogs over the coasts and adjoining waters. They do not, however, extend far inland. The

island furnishes a fine example of an insular climate. In summer the temperature ranges from 70° to 80°, and in winter it rarely falls below zero.

The fisheries constitute the principal industry of the island. The catching and curing of fish gives employment to about one-quarter of the population. Newfoundland is famous for its cod fishing. Cod are caught partly in the bays around the shores, but chiefly on the Grand Banks, a series of submarine plateaus from 600 miles long to 200 miles wide, and which are less than 100 fathoms deep. These lie to the south and southeast of the island. In summer the arctic current and the Gulf Stream meet. The warm water from the south melts the icebergs, and the earth which is frozen into them gradually sinks to the bottom. These banks abound in codfish, which are attracted there by the cold water and the abundance of food which the cold arctic current carries there, and on which the fish thrive. This current comes out of Baffin's Bay laden with tiny living creatures, "living slime," which furnishes food for the vast schools of cod and the shoals of herring, which wait for it on the Grand Banks.

The cod fisheries are the best in the world, and salmon, lobsters, seals, whales, porpoises, and herring abound in the neighboring waters.

The sealing fisheries are next in importance after the cod. The sealing season begins in March. The Greenland seal is brought down from the North on the ice-floes, on which they are rearing their young. The crews of strongly built vessels slaughter the young seals, which are not yet old enough to escape, for their blubber and skins.

The fisheries of cod, seal, and lobster constitute the chief industry and employ most of the population.

The mineral resources of Newfoundland are very great. Rich mines of copper have been opened up at Tilt Cove and at Betts

Cove on the northeast shore. The ore is shipped to England to be smelted. The great iron and steel works at Sydney, N.S., get their supplies of metal from an island in Conception Bay, near St. John's.

Coal, lead, nickel, and other valuable minerals exist, but are not mined to an extent.

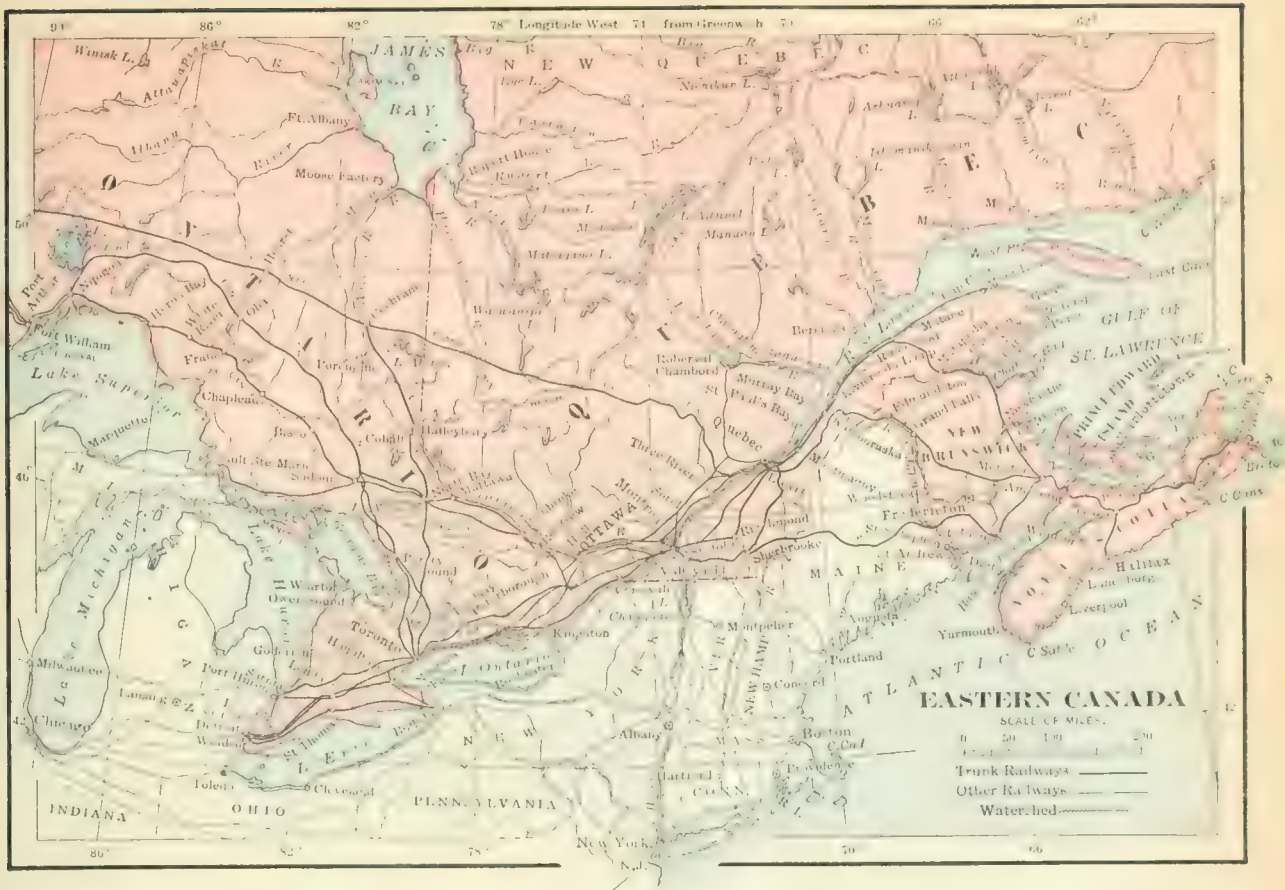
A government railway was built at the close of last century from St. John's northward to the lower Exploits River, westward thence to the Bay of Islands, and southward thence to St. George's Bay and Port-aux-Basques near Cape Ray. Branches have been built to various important places along the coast.

Newfoundland is the oldest British colony. It consists of the island and a strip of land on the eastern side of the Labrador Peninsula. The affairs of the country are conducted by a Governor appointed by the British government, assisted by an Executive Council of not more than nine members, a Legislative Council, and a House of Assembly of thirty-six members elected by the people.

ST. JOHN'S is the commercial centre and the chief port of the island. A narrow deep entrance leads to the well-sheltered harbor, which contains one of the best graving-docks in America. There are tanneries and breweries, as well as furniture, biscuit, and shoe factories. The only railroad starts from St. John's, and makes a circuit of the island, 548 miles.

Harbor Grace is the second town, eighty-four miles from St. John's. It is an important trade centre, but the harbor is rather exposed. *Carbonear*, *Twillingate*, and *Bonaville* are the largest towns. *Port-aux-Basques*, the western terminus of the railway, is only sixty-five miles distant from North Sydney. *Cape Breton*, where the Intercolonial ends, *Heart's Content*, on Trinity Bay, is the landing place of six Atlantic cables.

EASTERN CANADA.



The northeastern part of North America, consisting of the Eastern Provinces of Canada and the Northeastern States as far south as Mason and Dixon's Line, is a region diversified with mountain and valley and watered with numerous rivers and lakes. It is essentially a hilly country, formed by the extension of the Appalachian Mountains from the State of Pennsylvania northeastward, and by the eastern stretch of the Laurentian Plateau into the Province of Quebec and the peninsula of Labrador. The mighty St. Lawrence with its numerous tributaries is the most remarkable feature of this part of North America.

The coast of this entire section is very irregular, with many capes, peninsulas, bays, and harbours.

The occupations of the people consist mainly of agriculture, fishing, lumbering, mining, manufacturing, and commerce. Dairying is

one of the chief farming industries in this region. The bays along the coast and the neighbouring waters furnish a never-failing source of food not only for the people of the region but also for export. Lumbering is still an important industry in almost every part of this district. The water power supplied by the many streams falling into the St. Lawrence River and the Atlantic Ocean furnishes an inexhaustible source of power for manufacturing purposes. The coal and iron mines of this region are especially important and employ many workmen.

Which of the Northeastern States border on Quebec? Which State borders on Quebec and Ontario? Which State is crossed by the Canadian Pacific Railway? Which by the Grand Trunk? In what direction does the St. Lawrence River flow? What parallel of latitude forms the boundary between Pennsylvania and Maryland? This boundary is known as Mason and Dixon's Line. Mason and Dixon were two surveyors employed in the early days to mark the boundary between these States.

UNITED STATES.

What peninsula in Canada just northeast of the United States? What peninsula in the southeastern part of the United States? What plain extends between these two peninsulas? In what country does this plain lie?

Position and Coast Line.

The United States was settled by hardy, enterprising people, has a great deal of fertile land, a favorable position, and has become a very flourishing country. It reaches so far north and south that it has several different climates and contains nearly one hundred millions of people. Its *foreign commerce* is aided by its situation and by the many fine harbors on the eastern coast. There are some on the south also, but very few on the west coast.

Relief.

The Pacific Coast rises abruptly from the sea, but the Atlantic Coast slopes a long way to the foot of the Appalachian range. For some distance east of the Rocky Mountains the central plain is highland, but the east half of the country is mostly lowland.

The central plain slopes gently on either side towards the Mississippi and also southward towards the Gulf of

Mexico. This great central plain contains many smaller hills and valleys, and has forests in the north, the east, and the south, but the western part consists chiefly of open grassy plains or prairies, with few or no trees.

Enclosed by two mountain chains is the western plateau or highland. Give the names of these mountains. What two States lie between them?

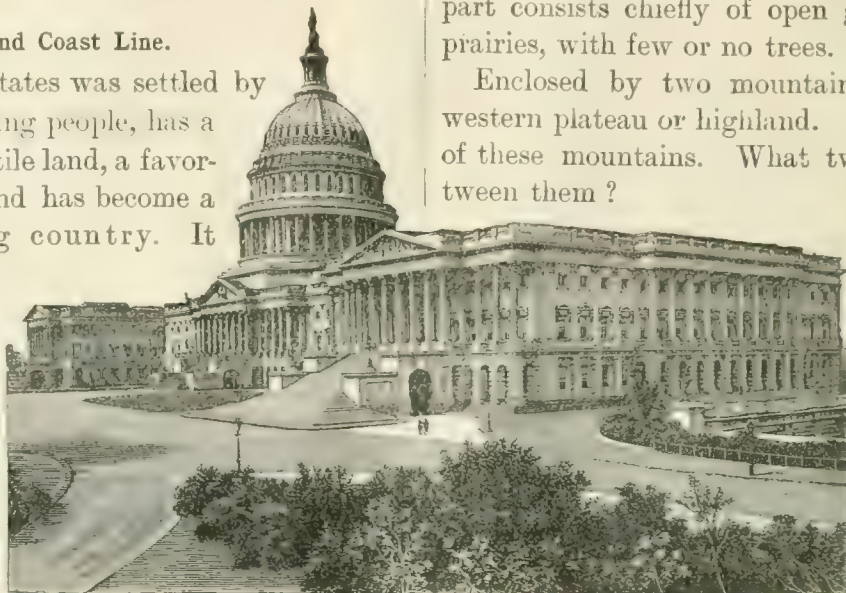
Drainage.

The internal trade of the country is carried on conveniently along the sea coasts and across the great lakes. In the central plain are deep

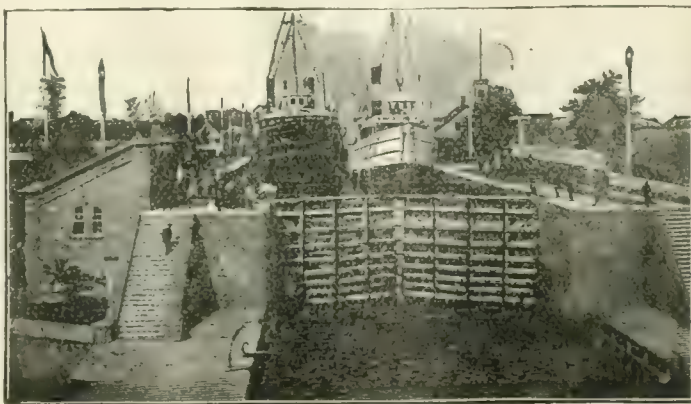
and broad rivers that supply many thousands of miles of navigable waters. In the northeast many rivers have their sources west of the Appalachian range and make their way through the mountains by narrow gorges or water-gaps cut out by running water. Many of these gaps are very useful indeed, for it is easy to make railroads and canals by such routes.

At the mouth of the Hudson has grown up New York, the largest city in America.

From the Rocky Mountains to the Pacific Coast, the Colorado flows into the Gulf of California. It is fed by the melting



The Capitol at Washington.



Lock, St. Mary Falls Canal.



UNITED STATES

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1. The first part of the paper is devoted to the study of the asymptotic behavior of the solutions of the system (1) as $t \rightarrow \infty$. It is shown that the solutions of the system (1) are bounded and tend to zero as $t \rightarrow \infty$ if the matrix A is stable. The second part of the paper is devoted to the study of the asymptotic behavior of the solutions of the system (1) as $t \rightarrow \infty$ if the matrix A is not stable. It is shown that the solutions of the system (1) are unbounded and tend to infinity as $t \rightarrow \infty$ if the matrix A is not stable.

the first 1000

snow on the mountains and has a deep, narrow gorge or canyon, with steep sides and many falls and rapids, but the Columbia is navigable both above and below the rapids, where it cuts its way through the Cascade Mountains. What is the large branch of the Columbia? South of Snake River to the Colorado between the Wasatch Mountains and the Sierra Nevada lies a



East River, New York, and Brooklyn Bridge.

high plateau called the Great Basin. None of the streams of this region go to the sea.

Name the largest lake. What city is near it? Sketch a map of the United States, show the Mississippi, the Missouri, the Ohio, the St. Lawrence, the Columbia, and the Colorado Rivers.

Heat and Rainfall.

Most of the winds that blow over the United States and Southern Canada come from the west, southwest, and south. The western winds cross the Cascade Mountains and the Sierra Nevada, and are cooled so much that most of their moisture falls on the western slopes of these ranges. Beyond this they sweep over the western highlands as dry winds, and thus much of that region is so dry that few trees or food plants will grow, and these arid districts are partly desert. The eastern half of the United States is well watered and makes one of the best farming regions in the world.

Much rain falls along the gulf coast, but the northern part of the Mississippi valley has less rain, and crops are less certain.

Sections of the United States.

We can study this country in five great sections or divisions.

(1) THE NORTHERN SECTION, which includes twenty food-producing States.

Find New York, New Jersey, Delaware, Pennsylvania, Maryland, Virginia, West Virginia, Ohio, Kentucky, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, Kansas, Nebraska, South Dakota, and North Dakota.

(2) THE NORTHEASTERN SECTION, which includes six manufacturing States.

Find Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

(3) THE SOUTHERN SECTION grows cotton and contains eleven States.

Find North Carolina, South Carolina, Georgia, Florida, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Texas, and Oklahoma.

(4) THE WESTERN PLATEAU SECTION, made up of eight States.

Find Montana, Idaho, Wyoming, Colorado, Utah, Nevada, Arizona, and New Mexico.

(5) THE PACIFIC SECTION, the western farming and fruit section, contains three States.

Find Washington, Oregon, and California. Alaska Territory is far to the north.

The United States has the greatest railway system in the world, and several lines reach across the continent. In the east and north almost every



Winter in the North.



Winter in the South.



own has its railway. On the south and west there are many lines, but fewer than in the north. All these roads help to transport products to the places where they are wanted.

The Northern Section.—The most important product of this section is grain, of which wheat is the most valuable, and grows best north of the Ohio and the Missouri. Corn grows well in all the States and also in the southern and eastern sections. Cattle, hogs, and sheep are raised in great numbers, and the eastern parts produce butter, cheese, and small fruits in abundance.

New Jersey, Delaware, Maryland, and Virginia have market gardens that supply the great cities of the east. From the bays on the coast of these States oysters are sent all over the north and also to Canada. The iron and



Blast Furnace.

coal mines are equal to the best in the world, and this section contains many large and flourishing cities.

Chicago is the second city of America next to New York, and the greatest railway centre in the world.

Find Cleveland and Buffalo.

Cincinnati is the largest city in the Ohio basin and St. Louis is a large city near the middle of the Mississippi valley. Louisville in Kentucky and Richmond in Virginia are important trade centres. Pittsburg

deals largely in coal and iron; Philadelphia manufactures locomotives, steel ships, and machinery, but the greatest iron and steel works are at Pittsburg and Chicago.

Petroleum is found in Pennsylvania chiefly, but also in Ohio, Indiana, and West Virginia. Natural gas is also obtained in this region. Pork and beef are



Gathering Oysters, Chesapeake Bay.

packed in immense quantities at Kansas City and Chicago. Clothing, books, and newspapers are produced largely at New York, Chicago, and Philadelphia. The latter is also a seaport and great coal market. Washington is the national capital, and Baltimore is the central depôt for the oyster fisheries.

New York is built partly on Manhattan Island and has a fine harbor. Next to London it is the second city in the world, and is composed of five boroughs of which Brooklyn is the chief. Most of the foreign trade of the country passes through this port.

The Northeastern Section.—The six States are often called New England. The summers are

moderately cool, but the snow fall is heavy in winter. Much of the country is rough and rocky, and the river valleys contain almost the only good farming land. There are extensive forests in the north; the southern part forms a portion of the great manufacturing region of the country. The rapid streams afford abundant water power near the coast, and there are many good harbors where sea-going ships bring the trade of the world.



Commonwealth Avenue, Boston.

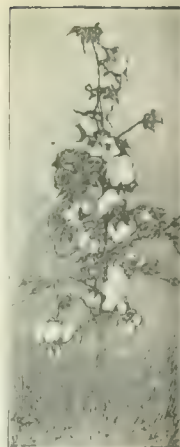
Boston, the largest city, has many factories and a great fish market, and is the centre of the wool trade. Near by is Cambridge, which like Boston is an important literary place, and the seat of Harvard University.

Cotton, woollen, and shoe factories; clocks, watches, bicycles, firearms, hardware, sewing machines, paper pulp—these belong to the industries of New England. Boston and Portland are the seaports for large vessels.

Each pupil may take one of the following cities, find out all he can about it, and then recite before the class in turn: 1. New York, 2. Chicago, 3. Philadelphia, 4. St. Louis, 5. Boston, 6. Baltimore, 7. Cincinnati, 8. Cleveland, 9. Buffalo, 10. Pittsburg, 11. Washington, 12. St. Paul.

The Southern Section.—In all this section the summers are long, the winters short, and snow seldom lies on the ground. The cities are not so

numerous as in the north; most of the people live on farms or plantations and their most important crop is cotton. This is the fluffy fibre that grows round the seed of a bush three or four feet high. The seed-pods ripen and burst and then the cotton hangs from them in white balls. Besides cotton, these States produce corn, sugar, rice, and tobacco. Early in the season they send to the northern cities fruit and spring vegetables. The coast plain contains some large tracts of forest chiefly southern pine, which yields valuable lumber and a great deal of turpentine and resin. There are cotton factories in many places especially in North Carolina, South Carolina and Georgia. North Carolina manufactures tobacco, Alabama and Tennessee mine iron ore in the mountains and produce much iron



Cotton Plant.

Find Birmingham and Chattanooga, where there are extensive rolling mills. Coal is abundant in the south. Find New Orleans the great cotton market and the largest city of the south. It enjoys a large trade down the



Cutting Sugar-Cane, Louisiana.

Mississippi, and exports cotton, rice, and sugar. Mobile and Galveston are great cotton markets, and Memphis is a large river port. Wilmington deals in lumber, turpentine, and cotton; Savannah and Charleston in cotton and rice. Florida is a sandy peninsula with many lakes and swamps, and sends oranges, lemons, and vegetables to the north. Find St. Augustine and Jacksonville. Many invalids go there to spend the winter. Texas is the largest of all the States and raises much cotton, some wheat, and vast herds of cattle.

Find Dallas. What river divides Texas from Mexico?

The South has a wonderful variety of scenery—forests in the Atlantic and Gulf States, prairies in Texas, orange groves in Florida, cypress swamps in Arkansas, Mississippi, and Louisiana, the flood plain of the Mississippi, and the mountains of Tennessee and Georgia.

Find out all you can about these cities and tell it to the class: 1. New Orleans, 2. Nashville, 3. Atlanta, 4. Memphis, 5. Charleston, 6. Savannah, 7. Dallas, 8. Mobile, 9. Chattanooga, 10. Galveston, 11. Birmingham, 12. Augusta.



Picking Cotton, Mississippi.

The Plateau Section.—These States occupy a vast plateau over a mile above the sea-level, from which the mountains rise nearly two miles higher. This dry plateau region is so high that the climate is healthful; but its summers are very hot and its winters quite cold, except in Arizona and New Mexico. By means of irrigation-ditches the water is led over the land, and thus crops of grain, hay, and fruit are grown although there is little or no rain to

water them in the usual way. The mountainous regions in all these States produce a great deal of gold, silver, and copper. Mining is the most important industry, and mining cities have sprung up in these regions. Nevada, Colorado, and Montana produce immense quantities of silver, and the latter also furnishes very large amounts of copper.

Leadville is in a rich silver-mining district. Butte is the great copper-mining centre; but the largest city is Denver. Pueblo is a manufacturing and railroad centre. The smelting and reduction of ore is a leading



Rice Fields.

industry in all these cities. The Yellowstone National Park is famous for its scenery and for the hot springs called geysers that spout high columns of steam and hot water at short intervals.

Salt Lake City is noted for the vast system of irrigation which has turned many miles of arid desert into a fertile country. The two southern States of this section are so hot and dry that large areas produce no vegetation but sage-brush and cactuses.

The Pacific Section.—These three States are very fertile and are the great food-producing

region of the west. The eastern parts however,



Vineyard, California.

reach into the dry plateau region, but most of the western portions receive sufficient rain for farming and in the south irrigation is extensive. The westerly winds modify the heat of the Pacific coast so that there is not much difference in the seasons, except that most of the rain falls in the winter, while the summers are quite dry. The grain fields of this section lie chiefly west of the Cascade and Sierra Nevada ranges, but fruit comes to perfection in almost every part of the Pacific coast, and in southern California oranges, grapes, raisins, pears, and plums are the chief product. Much fine wool is produced and large herds of cattle are raised in the higher lands. Immense shoals of salmon ascend the Columbia and other northern rivers, and on the mountain slopes are extensive forests of Oregon pine, redwood, and



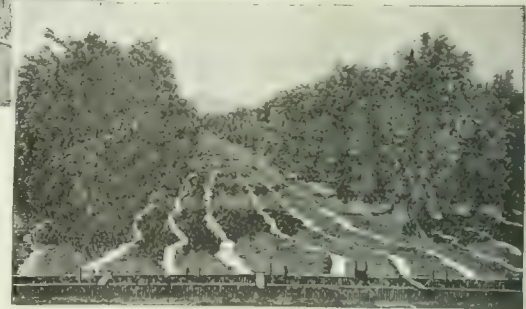
Raisin Making, California.

cedar. San Francisco is the largest city on the western coast and has a very fine harbor. Los Angeles is the chief market for fruit and wine. Ocean steamers ascend the Columbia and Willamette rivers as far as Portland.

Alaska was purchased by the United States from Russia. It consists of a large peninsula and a long chain of islands chiefly valuable for their seals, codfish, and salmon. Rich gold mines have been discovered along the Yukon River. The climate of northern Alaska is one of extreme cold, but in the south it is milder than that of the same latitude on the Atlantic coast. This is due to



Totem Poles, Alaska.



Irrigating an Orchard in the Arid Lands.

the warm, moist winds of the Pacific which blow over its shores. The seal fisheries are the most noted in the world. Most of the natives of the southwest coast are Indians. SITKA is the capital and most important town.

Find out all you can about the following cities and write a short paragraph about each : 1. San Francisco, 2. Denver, 3. Los Angeles, 4. Portland, 5. Salt Lake City, 6. Seattle. Read your composition aloud to the class.



Grain Elevator in Chicago.

In addition to the part found on the main land, including Alaska, the United States possesses several dependencies in different parts of the world and a few small islands in the Pacific Ocean. These dependencies include the territories of Hawaii, Porto Rico, and the Philippine Islands, all of which are of great value because of their products.

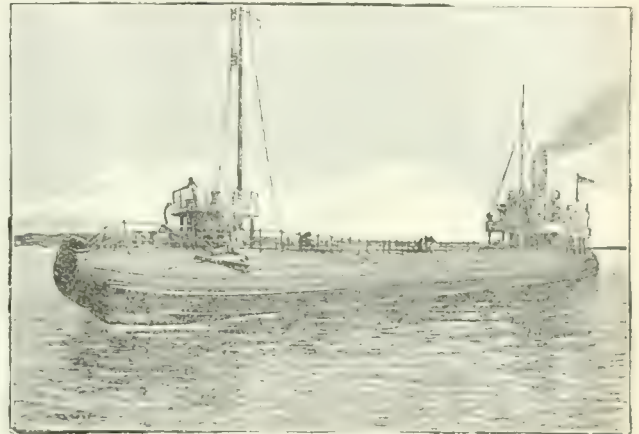
The Hawaiian Islands are very mountainous and extremely volcanic, and are situated about one third of the way across the Pacific Ocean. Hawaii is the fourth largest producer of sugar-cane in the world. Rice and bananas are also raised in large quantities and in great perfection. Honolulu, the capital, has electric cars and electric light.



Lumbering.

The Philippine Islands are a large group lying southeast of Asia. The islands are mountainous and volcanic. The climate is tropical, and they produce sugar, coffee, tobacco, and hemp. Rice is extensively raised for home use. The capital is Manilla, situated in the southern part of Luzon, the largest island.

Porto Rico is among the larger of the West Indian Islands. The island is covered with forests which contain valuable cabinet woods. The leading agricultural products are sugar, coffee, tobacco, and tropical fruits.



A Whaleback Lake Steamer.

Name three western branches of the Mississippi. What states does each cross or border? What is the largest eastern branch of the Mississippi? Follow the course of a steamboat from New Orleans to Nashville, in Tennessee. From New Orleans to Chattanooga, also in Tennessee. What are the two southern branches of the Ohio? Through what states do they flow? Name the five Great Lakes. Name the states that border on these lakes. What great river drains these lakes? Name two short rivers that empty into the Gulf of Mexico. What river flows northward into Lake Winnipeg? Where do these waters finally go? Point out the Savannah river, the Columbia, the Colorado, and the Rio Grande. Name the states that are crossed by the Appalachian mountains. Name those crossed by the Rocky Mountains. What states border on the Atlantic? Name those on the Pacific Coast, and those along the Gulf of Mexico. Name the states that border on Mexico and those that border on Canada.



Mexico and Central America.

Name the country south of the United States. (See map on p. 27.) What waters are east of Mexico? West and southwest? What peninsula is in the west of Mexico? How is this peninsula separated from the rest of Mexico? What peninsula is in the southeast of Mexico? What are the relative positions of the Gulf of Mexico and the peninsula of Yucatan? What river is between the United States and Mexico? What language is spoken south of that river? (See page 87.) What land lies southeast of Mexico?

Which is the longer, the eastern or the western coast of Mexico? How do you know that Mexico lies in a warm region? Give reasons for believing that Mexico has a varied climate. Describe the position of the Capital of Mexico. Why is the city of Mexico not an extremely warm place?

North America begins to narrow rapidly at the northern part of Mexico, and becomes an isthmus in Central America. A ship canal, about 50 miles long, has been constructed across the isthmus of Panama. The largest vessels afloat can pass through it. It

extends from Colon to Panama, two ports on opposite sides of the isthmus.

Is the surface of Mexico and Central America level or mountainous? Of what region in the United States do these countries form a continuation?

The coasts of these countries are low and level, but a little way from the shore the sur-



Their houses are often wretched hovels.

face slopes rapidly upward to a high plateau or *table-land*. In what zones are these countries? The lowlands are hot, moist, and unhealthful; the highlands are not so hot, and are very dry.

The table-land is bordered with mountain ranges, so high that many of the peaks are always snow-covered. At times some of them pour out clouds of steam and streams of white-hot melted rock or *lava*. For months their tops may be hidden in clouds of steam, while at night the gleam of the hot lava is so bright that the mountains seem on fire. Such peaks



Mexican Women grading Coffee.



City of Mexico.

are called *volcanoes*; each is a sort of chimney through which steam and other gases, formed within the earth, may escape. Farming, cattle raising, and mining are the chief occupations. In the hot lowlands are plantations of cotton, sugar-cane, coffee, and tobacco, and groves of orange trees and bananas, and of tall, feathery palm trees.

Along the foot and sides of the table-land is a region of tangled forest, where chattering monkeys and gaudy humming-birds are found. In the forests are mahogany

trees, the vine bearing the vanilla bean, and the sarsaparilla plant.

Some of the plants of the table-land are like those which we see at home, for the weather, though usually quite dry, is much like that of the temperate zone. In the forests are oak and cedar trees, while corn, wheat, and beans are grown on the farms.

One of the most useful plants is the *maguey*. This is the same as the "century plant" grown in conservatories at home. From its sap a popular drink is prepared; its pulpy roots are used for food; and the fibre of one kind of maguey is used in making twine and coarse bagging.

But the chief wealth of the table-land comes from the silver mines and the herds of cattle and sheep. The Spaniards who first settled these states went there in search of gold and silver, and the mines of Mexico have produced silver ever since. Many cattle raised in Mexico are sent to the north, and much wool grown



Mexican Volcano and Maguey Plant.



Mexicans grinding corn and baking bread.

there is made into cloth in the mills of the United States. Much silver ore from the mines of Mexico is also sent to the United States to be smelted.

More Indians lived in this part of America than in the northern part, and they were not so savage. Many of the Spanish settlers married Indian women, and their children were half-breeds. Most of the people now are half-breeds and partly civilized Indians. The Spaniards and a few of the half-breeds own most of the land and are rich and powerful, but the Indians and most of the half-breeds are poor, ignorant, and wretched. They are the laborers on the farms and in the mines, and are little better off than slaves.

The people who work on the farms live in villages and towns. Their houses are often wretched hovels; a hole through the wall answers for a window, and the hard ground for a floor. The walls are built of straw, or of sun-dried brick called *adobe*, and the roofs are covered with tiles or with coarse grass.

Indian corn and beans are the food of most of the common people. The beans are cooked with red pepper pods. The corn is ground by hand between two pieces of stone, into a coarse meal. It is then made into a dough, and thin pieces are laid in a very hot clay oven to bake.

Following the example of the English colonists, the descendants of the Spanish settlers

freed themselves from the mother country Mexico is a republic, and Central America contains several small republics.

What is the capital of Mexico? It is the largest city. What important seaport is on the Gulf of Mexico? What is the name of seaport on the Pacific coast? (Page 86).

TOPICS ON SPANISH NORTH AMERICA.

- I. COUNTRIES. The larger. The smaller.
- II. SURFACE AND CLIMATE.
- III. PRODUCTIONS. Of the mines. Of the plantation. Of the forests. Cattle.
- IV. PEOPLE. Ancestors. Language. Food. Houses.

West Indies.

What group of islands southeast of North America Name the four largest. What group north of Cuba form part of the West Indies? What sea between the West Indies and South America? In what zone are most of the West Indies? (See map, page 27).

The West Indies are so cooled by ocean breezes that they are neither so hot nor so unhealthy as the lowlands of Central America; but at times they are visited by terrible windstorms, or *hurricanes*, which blow down buildings and sink ships.

The Bahamas are low, sandy islands surrounded by shallow waters, but the large islands of the West Indies are the high and rugged tops of a range of mountains whose lower part is covered by the ocean.



Market scene, Mexico.

It was on one of the Bahama Islands that Columbus first landed; therefore the Spanish claimed the West Indies. They made slaves of the Indians and worked them to death, and when negro slaves were brought to the plantations. Now there are more negroes than white people in the islands, but they were all free many years ago.

Cuba is the largest of the West Indian lands. It was formerly a dependency of Spain, but since 1902 it has been an independent republic with a president, vice-president, senate, and a House of Representatives; Porto Rico is a dependency of the United States (page 85); Jamaica, Trinidad, the Bahamas, and most of the other islands belong to the United Kingdom; but Haiti is occupied by two independent negro republics. Many of the islands are surrounded by coral reefs. These are low rocks made by the coral animals, or *polyps*. They are found in many parts of the sea where the water is clear, warm, and not too deep.

The polyps live in great colonies and are attached to the bottom of the ocean. When they die their stony skeletons are left as a rocky mass, while other polyps grow, like buds on a branch, from the foundation thus left. In this way the rocky mass gradually grows upward to the surface of the water, where it forms a jagged reef of coral rock. By the aid of the sand piled up by the waves and the winds, reefs are sometimes built up above the surface of the water to form low coral islands. There are many such coral reefs and islands in the warmer parts of all the oceans. Some coral islands form a nearly complete ring, partly inclosing a portion of the sea. Such islands are called *atolls*.

In the shallow waters of the Bahamas, sponges are found. Tell some uses of sponge. The sponges which you all have seen are the



Sugar mill in Cuba.

skeletons of jellylike animals which fasten themselves to rocks and feed on what the waters bring them.

On the lowlands of the West Indies palm trees grow; mahogany and a very hard wood, called *lignum vitæ*, of which lawn bowls are made, grow on the higher slopes.

Sugar is largely produced in Cuba. It is made from the sugar cane, which looks much like a cornstalk, but has a sweeter sap. The cane is taken to mills, where the sap is squeezed out between heavy rollers. The sap is then boiled until it becomes brown sugar. This "raw" sugar is sent mostly to the United States, where it is refined into white sugar.

Much of the finest tobacco also comes from the West Indies. Coffee, bananas and other tropical fruits grow in these islands. From the Bahamas pineapples and oranges are shipped to the eastern cities of America.

Where is Havana? This is the capital of Cuba, and is a great sugar and tobacco market.



Young palm trees,
West Indies.

In what direction does Jamaica lie from Cuba? Of the West Indies, Jamaica is the third island in size. Like many of the other islands, this is a British possession. The centre of the island is mountainous; but the hills and ravines are covered with luxuriant vegetation. What are three most important conditions upon which the fertility of a country depends? In the lower slopes; the soil is very fertile, rainfall is abundant, and the climate is congenial. Under such conditions what is likely to be the chief occupation of the people? Most of the inhabitants are



Loading Bananas at Port Antonio, Jamaica.

engaged in agriculture. Formerly the chief product was sugar-cane, but in recent years it is found more profitable to grow early vegetables and tropical fruits, as pineapples and bananas. Lines of fruit steamers, employed chiefly in the banana trade, connect Kingston, the capital, and one of the chief ports, with Halifax, Boston, and New York. Jamaica is also connected with the Mother Country by other steamship lines, which carry bananas, oranges, and vast quantities of coffee, sugar, and dye-woods. The inhabitants are chiefly negroes and mulattoes, there being fully forty or fifty blacks to one white person.

In what direction is Haiti from Jamaica? (See page 27.) Haiti was the first large island discovered by Columbus. This soon became an important Spanish colony, and rich mines were soon developed, but Spain lost island after island, and Haiti is now independent and the home of two republics. Most of the inhabitants are negroes, the descendants of the slaves of the early Spanish settlers. Like the other inhabitants of the West Indies, their chief occupation is agriculture. Sugar, tobacco, coffee, and bananas are the chief products. The forests which cover the greater part of the island contain many valuable woods.

Where is the island of Trinidad with reference to South America? (See page 96.) Trinidad, one of the most southern of the West Indian islands, is in some respects the most remarkable. It lies close to the northern coast of South America, which it greatly resembles in the dense, tangled undergrowth of its forest and in the brilliant foliage of its vegetation on its wooded heights. It is noted the world over for a lake of asphalt or pitch. This lake covers an area of 12 acres. The pitch is sufficiently firm to support trucks, which run along it on rails. The asphalt is dug from a long trench during the day, and when the workmen return next morning the pressure of the surrounding pitch has caused the trench to be filled in. Thus day after day the work of filling barrels for export from the same trench goes on. Many thousand tons of asphalt are yearly sent to Canada, the United States, and Europe, to be used in paving roads and roofing houses.

Sketch a map of the West Indies. In what direction is Havana from Florida? Name the four largest of the West Indies in order of their size. What two peninsulas and what island help to form the Gulf of Mexico?

REVIEW EXERCISES.

Climate.—In what zones is North America? In which zone is the main body of the United States? In which zones is Canada? In which is Mexico and the West Indies? In which zone is Central America? Why are the products of both the warm and the cool belts found in Mexico? Which is the most populous country of North America? In which part of Canada do most of the people live? Why? In which part of Mexico is the climate moderate? Why? In what region of Mexico do most of the people live? Why? Is the larger island group north or south of North America? Which group is more valuable? Why? Follow with your pencil the water connection between the Atlantic and Pacific oceans north of North America. What connection has been made between these oceans? Where? What bay extends into the north coast of North America? What great gulf on the south coast? Which is more frequented by vessels? Why? What are the four great rivers east of the Rocky Mountains? Which is most useful? Which is least useful? Why? What three river systems have large lakes? On which of these lakes are cities built? Why? On which are there no great cities? Why?

Position and Coast.—With what grand division does North America trade across the Atlantic Ocean? With what grand division does she trade across the Pacific Ocean? In which of these grand divisions are the people more advanced in civilization? To which are the Americans more closely related? How? Which ocean is the broader? On which coast of North America are there more gulfs and bays? On which coast are there more seaports? Give several reasons for this. Which grand division of the Eastern Hemisphere approaches the closer to North America? What strait between North America and Asia? Why is there not much trade across this strait?

Surface.—Where is the continental divide of North America? Into what two slopes does it divide North America? What region of North America is high? What region is low? What region is moist? Why? What region is dry? Why? Into which ocean do most of the rivers flow? Why? In which portion is agriculture a chief occupation? Why? What limits agriculture on the north? What is the great grazing region of North America? Why is it a grazing region? What is the chief wealth of the mountain region of the West? Why did people go to the Pacific coast of North America? What are at present the chief occupations in that region? Why? What are the highlands of eastern North America? What minerals do

they contain? What are the natural trade routes from the coast to the centre of the continent of North America? What is the great barrier to trade across the continent? How is this barrier crossed? Why is the Mississippi valley productive? What are the chief crops raised in its northern part? In the southern part? In what direction do the rivers of the Atlantic coast plain flow? Why? What are the products of this plain? What are the products of the St. Lawrence valley? What are the advantages of the upper part of the Mississippi valley for manufacture? What are the advantages of the coast plain for manufacture? What are the products of the western highland in the United States? In Mexico and Central America?

Products.—Sketch an outline of North America, and write in the proper places the names of the vegetable products found there. Forests: oak, pine, cedar, redwood, mahogany; grains: wheat, corn, rice; market vegetables; fruits: pears, oranges, grapes, bananas.

On another sketch write in the proper regions the names of the minerals found there: iron, coal, salt, copper, petroleum, natural gas, gold, and silver.

On another sketch write the names of the following products. Fibres: wool, cotton; animals: cattle, hogs, sheep; fish; tobacco; timber.

Cities.—Sketch an outline of North America, and write in the proper places the names of the great manufacturing cities, with the name of the chief manufacture of each. Write the names of the capitals and chief seaports in a similar map.

Governments.—In what province do you live? What is its capital? Who is the governor? What is the capital of the United States? Who is the president? What is the government of the United States called? What is the government of Canada? The capital? What is the government of Mexico? Its capital? What is the form of government in the Central American States? What people lived in America when the white men discovered it? What people mostly settled the United States? What people settled Canada? What people settled in Mexico and Central America? In what regions do the Indians live now? Where do the Eskimos live? Name other races found now in North America. Where did each come from? Do the English-speaking or the Spanish-speaking people of North America occupy the larger territory? Which other country of North America is most like ours in manners and customs? Are the English-speaking or the Spanish-speaking people of North America the more progressive?

SOUTH AMERICA.

Location, Size, and Shape.

Turn to the map on p. 10. What direction is South America from North America? How are they connected?

Balboa, a Spanish follower of Columbus, crossed the Isthmus of Panama on foot and discovered the Pacific Ocean. People now

cross the isthmus on a railroad which carries passengers and goods from one ocean to the other, or sail in a vessel from Colon, on the Atlantic Ocean to Panama on the Pacific Ocean, through the newly constructed canal.

Vessels going around the southern part of South America are said to "round the Horn." Why? What large island is south of South America? What strait is north of Tierra del Fuego? This strait was named after the man who commanded the first expedition that sailed around the world.

When Magellan entered the strait in October, the signs of spring were just appearing. In what month does spring begin where you live? In what zone do you live? Explain why it is that in the Strait of Magellan spring begins in October.

Compare this map of South America with that of North America on p. 24.

Which grand division is the larger? (See reference tables, page 175). How does the greatest width of South America compare with its length?



SOUTH AMERICA. (Same scale as maps of North America, Eurasia, Africa, and Australia.)

Here is a map of South America on the same scale as the maps of North America on pp. 24 and 27. What ocean is east of South America? What ocean is west? What sea is north of South America?



An almost unbroken mountain wall.

What is the general shape of South America? Which side is longest? Which is shortest? What is the general direction of the Pacific coast line? Of the north Atlantic coast line? Of the south Atlantic coast line?

Which has the greater number of gulfs and bays, North America or South America? Where is the Gulf of Guayaquil? Lake Marajó is a gulf rather than a lake. The mouths of two rivers on the east side of South America widen out into bays. Name the rivers.

Near what part of South America are most of the islands? Find the Falkland Islands. Where is Trinidad Island? It contains a large lake of pitch or asphalt. Much of the asphalt used for our street pavements comes from this island. Just west of Valparaiso is the island about which the story of Robinson Crusoe was written.



Sketch an outline of South America again and again until you can make a good outline in two minutes.

LOCATION, SIZE, AND SHAPE OF SOUTH AMERICA.

- I. LOCATION. Waters surrounding. Circles crossing.
- II. SIZE. Compare with North America. Breadth and length.
- III. SHAPE. General. Coast lines: names; description.

Relief.

How many mountain chains are comprised in the Rocky Mountain highland of North America? What are the names of these chains? They are broken by many mountain passes. What is a mountain pass?

South America has an almost unbroken mountain wall along its western border. What is its name? From what point and to what point does it extend? What is its general direction?

Where is the Andes highland broadest? Where is the Rocky Mountain highland broadest? Which of these two highlands is the broader? The broadest part of the Andes highland is called the plateau of Bolivia. Find it on the map. It is nearly twice as high as the much broader plateaus of the Rocky Mountain highland.

In the central part of the Andes highland there are two main ranges of mountains, one on the eastern and the other on the western border of the plateau of Bolivia. In the northern part of the grand division the highland divides into several ranges, while south of the plateau of Bolivia it has only one main range.

Although the Andes highland is not so

broad as the Rocky Mountain highland, its ranges are much higher. They are so high that even in the hot zone many of their peaks are covered with snow all the year.

Many of the Andean peaks are volcanoes, built up in part by the lava thrown out from their tops. At times the ground in these highlands shakes so violently that buildings



Llamas are a little larger than sheep.

are thrown down, and many people are killed. What are these shocks called?

The Andes have long been noted for mines of gold, silver, and copper; and the high slopes and plateaus afford pasturage for sheep, cattle, and several kinds of llamas.

Llamas are woolly animals a little larger than sheep. They are now found only in or near the Andes, though ages ago they lived also in North America. It is somewhat like the camel of the Eastern Continent in its power of endurance. Like the camel, the llama can live for several days without food or drink. Llamas are used to carry packs of merchandise in the Andes, and flocks of a smaller kind are kept for their fine long wool.

One of the largest of birds, the condor, is also found only in the region of the Andes. It stands higher than a table, and from tip to tip of its outstretched wings is twice as long

as a man. It prefers dead animals for food, but when hungry sometimes kills and eats sheep or a deer.

From the Andes highland the country slopes east toward the Atlantic Ocean and west toward the Pacific. Which is the longer slope?

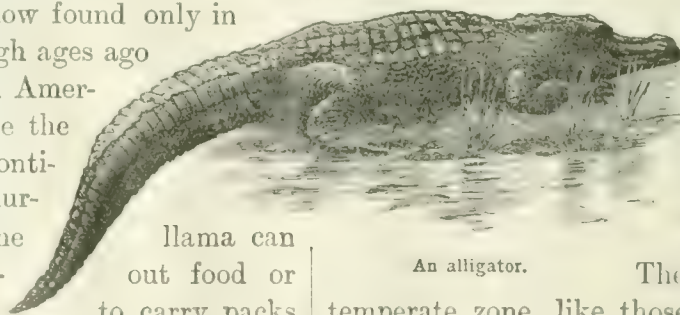
Do the highlands in the eastern part of South America look as high as the Andes? These eastern highlands are quite low and are traversed by low mountain ranges. What is the name of the small northeastern highland? Of the larger southeastern highland?

Is the surface of South America between these highland borders level or mountainous? Compare it with the great central plain of North America. Each is a broad lowland plain with high mountains on the west and low ranges on the east.

Model South America, showing the Andes, the plateaus of Brazil and Guiana, and the central plain.

RELIEF OF SOUTH AMERICA.

- I. **ANDES HIGHLAND.** Compared with Rocky Mountain highland: in position; in direction. Describe its length; height; passes; peaks. Plateau of F. livia.
- II. **ATLANTIC SLOPE.** Extent. Where it is broken by mountains.
- III. **PACIFIC SLOPE.**



An alligator.

Drainage.

In what zone is most of North America? From what direction do the winds generally blow in the north temperate zone?

The winds of the southern temperate zone, like those of the north temperate zone, blow generally from the west. From what waters, then, do the rain clouds of the southern part of South America come? On which side of the southern Andes is there most rainfall? Why? Why is there so little rainfall on the east side?

The winds of the torrid zone blow generally from the east. Remembering that the eastern highlands of South America are not very high, tell the whole story of the way the rain falls in the northern part of South America. If you cannot tell this story well, study again about rainfall, on pp. 42 and 43.

The central plain of South America, from the Caribbean coast almost to Cape Horn, is

even more level than the great central plain of North America, and, like it, is crossed near the central part by a swell of land. What two great river systems of South America does this low elevation separate?

What river drains the most northern part of the great plain? In what direction does this river flow? What slopes does it drain? It is deep enough for large vessels for many hundred miles from its mouth. Its broad, flat valley is called

the *llanos*, the Spanish word for "plains." In the rainy season millions of cattle and horses graze on the *llanos*. The streams are flooded with water, and the swamps are fairly alive with alligators.

With the coming of the dry season the cattle seek the hills, the alligators bury themselves in the mud, and the whole region becomes dry and brown.

What is the name of the longest river in South America? Near what circle is it? In what direction does it flow?

Most of the rain of South America falls in the Amazon basin. Why? This makes the Amazon the largest river in the world, though it is not the longest. Many miles from its mouth it is several miles wide, and steamers can ascend the river nearly to the foot of the Andes.

On which side of the Amazon are most of its branches? Name the longest. Name a northern branch. Can you find a channel that

connects the Orinoco and the Rio Negro?

The plains of the Amazon are called *silvas*, which means "forests." Dense, dark forests cover the whole country. Once or twice a year the rivers overflow their banks, and hence a great part of the *silvas* is always swampy. In this part the tall trees are matted together by hanging vines and air plants, while high ferns, mosses, and other plants fill the spaces between the trunks with vegetation which is al-



These forests are full of wild animals.

ways green. Boats on the rivers are the only means of travel. These forests are full of wild animals, most of which are climbers. The great catlike jaguar is the fiercest. The immense boa constrictor coils around his prey and crushes it. Both of these animals are shown in the picture. Troops of monkeys live and travel long distances among the tree tops. These forests yield rubber, mahogany, and dye-woods.

What large river system is south of the Amazon system? Where is the Parana River?



The Paraguay? The Uruguay? The basin of the Plata River, or Rio de la Plata, is about as large as the Mississippi basin. Its rivers are navigable for many hundred miles.

That part of the central plain drained by the Plata is called the *pampas*. Its southwestern part is an arid region. Why is it dry? In the northeast, however, enough rain falls for the growth of grain and fruit. Almost the

whole region is covered with long grass, with feathery white plumes. It contains the best herding grounds, and is the chief wheat-growing region of South America.

Find the São Francisco River. It is a highway of trade, and many people live in the lower part of its basin.

Sketch South America; locate the Orinoco, Amazon, and Plata rivers.

PLAINS OF SOUTH AMERICA.

1. CENTRAL PLAIN. Location.
Extent. Compare with central plain of North America.
2. LLANOS. Drainage. Seasons. Life.
3. SILVAS. Drainage. Rainfall. Forests.
4. PAMPAS. Surface. Climate. Life.

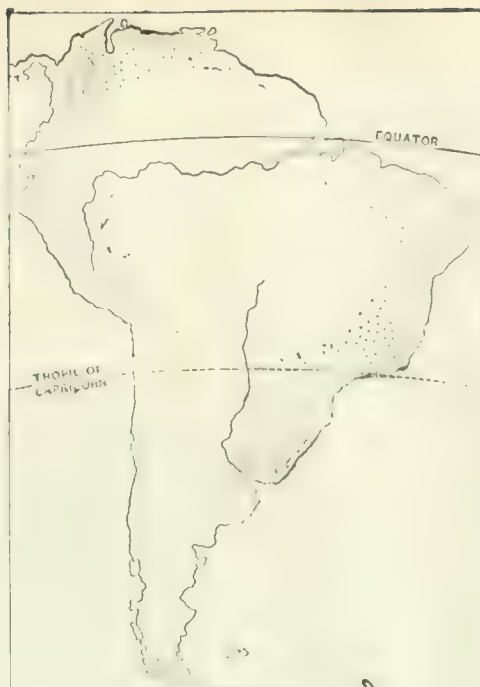
People.

There are fewer people in South America than in any other grand division except Australia. What parts are nearly uninhabited? The most thickly settled regions are about the mouth of the Plata and northward along the east coast.

Much of the land in the interior cannot easily be cultivated. Why? Why is the region east of the Andes in the south sparsely peopled? There is a belt of settled country extending across the continent? In what zone is the main portion of this belt? In what river basin is the greater part? It is rapidly becoming the most thickly settled part of South America. When first visited by white men, South America was inhabited only by Indians. Most

of the Indians were savages, but those in Peru, called Incas, were partly civilized. They wove coarse cloth, made pottery, and built excellent roads. Where is Peru?

There are still many wild Indians in the interior of South America. Most of them live in the region of the silvas, but some live among the mountains and some in the desert region of the south. Those along the Amazon hunt and fish. They use two kinds of weapons, a spear for killing fish and turtles, and a



The dots show where the most people live.

blowgun with poisoned arrows for birds and other game. Those in the south live chiefly by hunting the *guanaco*, a kind of llama which wanders in great herds over the arid plains.

When it was learned in Europe that gold and silver were to be found in South America, a great many people went there to make their fortunes. Most of them went from Spain or Portugal, a country adjoining Spain.

The Spaniards took all the Andes highland portion of South America and most of the pampas. Many of the

people now living there are the white descendants of these Spanish settlers, and the laboring classes there, as in Mexico, are mostly half-breeds of Spanish and Indian parentage.

Name all the countries of South America crossed by the Andes Mountains. Name the capital of each. In what respect are all these countries alike? Which one has no seacoast? Which are crossed by the equator? What two small countries are east of Argentina? In Uru-



The pampas contain the best herding grounds of South America.

guay and Paraguay, as in Argentina and the Andean countries, the Spanish language is spoken.

The Portuguese settled the eastern part of South America, and their descendants, both whites and half-breeds, still live in Brazil, and speak the Portuguese language.

Many negroes live in Brazil, and with the half-breeds form the laboring class. They were held as slaves until a few years ago.

All the South American countries were at first under the control of European nations, principally Spain and Portugal; but one by one they rebelled against the mother countries, until now Guiana only is held by European powers. All the other countries are republics.



Drying coffee.

The chief hero in the South American revolutions was Simon Bolivar, often called "the Liberator of South America."

With both the Spanish and the Portuguese settlers came many Catholic priests, who established missions and schools among the Indians; and to-day the Roman Catholic is the prevailing form of religion in South America.

PEOPLE OF SOUTH AMERICA.

- I. INDIANS. Former condition. Present condition.
- II. SPANIARDS. Spanish South America. Countries.
- III. PORTUGUESE. Portuguese South America. Country.
- IV. NEGROES.
- V. LANGUAGES OF SOUTH AMERICA.
- VI. FORM OF GOVERNMENT.

Brazil and Guiana.

Locate Brazil. Describe its surface. What rivers drain it? In what zones is it? Beginning with Guiana, name the countries that border on Brazil.

Brazil is not quite as large as our Dominion and contains nearly half the people in South America.

Brazil exports many things, such as rubber, cotton, sugar, tobacco, and hides, but it is



Picking coffee.

especially noted for its coffee. It produces about as much coffee as all the rest of the world.

Coffee grows on a tree bearing beautiful purple berry which contains two seeds. The ripe berries are gathered two or three times a year and thrown into vats, where the pulpy part is washed away from the seeds. The seeds are then dried, packed in sacks, and sent to the market, as coffee.

The coffee plantations are in the warm plateau region of southern Brazil. Where is Rio de Janeiro? The name means "River of January." It is the capital and largest city of Brazil, and is named after a little river on which it is situated. The river is so called because it was discovered one summer day in January. Can you think why Brazilian coffee is called *Rio* coffee? Most of the coffee shipped from this port goes to the United States.

In the narrow and crooked streets of Rio de Janeiro may be seen many negroes — men

women, and children — carrying burdens of all kinds balanced on their heads. On the outskirts of the town are handsome residences overlooking one of the most beautiful harbors in the world. The bay is nearly surrounded by high hills, where the wealthy citizens take refuge during the summer when the yellow fever prevails in the city.

Where is Santos? Much coffee is also shipped to the United States from this port.

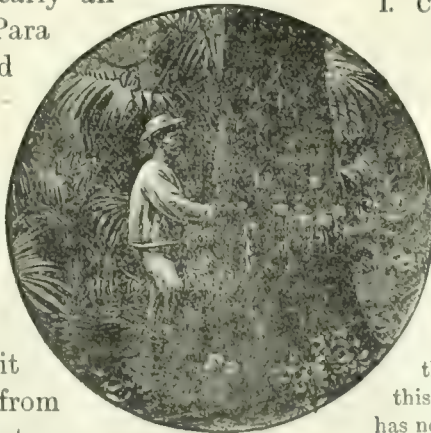
Where is Pernambuco? There are sugar plantations in this region.

Where is Bahia? Sugar and tobacco are its chief exports.

Rubber is an important product of Brazil. It is gathered by the Indians of the *silvas*, in the swampy forest. With his hatchet the Indian cuts a gash in the bark of a rubber tree; then with a piece of clay he fastens a little cup to catch the milky sap that slowly trickles out. When he has gashed about a hundred trees, he collects the sap from the cups. Next he builds a fire of palm nuts, and, dipping a wooden paddle into the sap, holds it in the thick smoke of the burning nuts until the sap has become hard and elastic. This hardened sap forms the rubber of commerce.

Where is Para? Nearly all the rubber is sent from Para to the United States and Europe, where it is used for bicycle tires, car springs, overshoes, and hundreds of other things.

The Brazil-nut tree and the cacao tree grow in the *silvas*. The fruit of the cacao is a bean from which cocoa and chocolate are made. Manioc, the root from which tapioca is made, is also a native of Brazil. All these products are shipped to Europe and the United States.



Collecting the sap.

Where is Manaos? It is the largest town in the interior of Brazil.

Guiana is much like Brazil in surface and climate. The English own one part, the French another, while the third part is owned by another



Smoking the rubber.

European people called the Dutch. The planters are white; many of the laborers are negroes. France sends criminals to French Guiana as a punishment. Sugar, gold, and cocoa are the chief exports. Find the capital of each division.

Sketch South America; show Brazil and locate Rio de Janeiro.

PRODUCTS OF BRAZIL.

- I. COFFEE. What it is. Location of the coffee plantations. Chief ports for shipment of coffee. Country to which most of it is shipped.
- II. SUGAR. The sugar plantations.
- III. RUBBER. What it is. How gathered. For what used.
- IV. OTHER PRODUCTS.

Argentina and the Plata Countries.

In what zone are the pampas? What river system drains this plain? In what direction does the plain slope? What mountains west? What are the products of this region? What three countries in this great plain? Which of these is the largest? Which has no seacoast?

Next to Brazil, Argentina is the largest and richest country of South America. Every year many thousand people come from Europe to make their home in its grain-growing lands,

and there are more white people there than in any other country of South America.

The herdsmen of the pampas are called *gauchos*, and are of mixed Spanish and Indian blood. There are no better horsemen in the world, and none more skilful with the lasso.

The herds of cattle and sheep form the chief wealth of the country, and great quantities of live cattle, packed meat, beef extract, tallow, hides, and wool are shipped to Europe.

The farms are mainly in the river valleys in the north, from which the wheat can be easily carried to the markets by vessels, but railways have been built to many of the farming districts. There are more miles of railway in



The herds form the chief wealth of Argentina.

Argentina than in any other South American country. One line is constructed across the continent. Argentina exports large quantities of wheat to Europe, most of which goes to England and France.

In Paraguay and Uruguay cattle raising is the chief pursuit, though Uruguay also produces large crops of wheat. An important industry in Paraguay is the gathering, curing, and shipping of the leaves of a kind of holly, called *maté*, which are widely used in place of tea in all the southern part of South America.



A ferry in Uruguay.

What is the capital of Argentina? Its name means "good air," but the city is not very healthy. It is the largest city of South America and a great commercial centre. Channels have been dredged in the shallow harbor, so the steamers can now come up to the wharves. In the crowded streets and showy shops are heard many languages, for one quarter of the people are foreigners. Where is Montevideo? It is the capital and largest city of Uruguay. Lines of steamships connect both cities with seaports of the United States and Europe. Find the capital of Paraguay. In most of the large cities of the pampas there are electric lights, telephone schools and colleges, and newspapers.

Sketch a map of South America; show Argentina, Paraguay, and Uruguay.



Steamers can now come up to the wharves of Buenos Aires.

ARGENTINA AND THE PLATA COUNTRIES.

- I. LOCATION AND BOUNDARIES.
- II. SURFACE AND DRAINAGE.
- III. CLIMATE AND RAINFALL.
- IV. VEGETATION AND ANIMALS.
- V. CITIES.

Read what is written about the pampas on p. 96.

Andean Countries — Chile.

What country of South America forms a long, narrow strip on the western slope of the Andes? What countries are east and what water west, of it?

There are many short streams flowing down the western slope of the Andes in Chile. In the fertile valleys of these streams are many farms. Some of the streams never reach the sea, for their water is carried in a maze of ditches to irrigate the farms. The mountain slopes of southern Chile are covered with heavy forests.

As in the other countries of the Andes, grain, wool, fruit, and silver are produced, but the chief wealth of Chile is "nitrate" or saltpetre, from which gunpowder is made and which is used in Europe as a fertilizer. It is dug from old lake beds in the desert region of the north.

Where is Iquique? Most of the saltpetre is shipped from this port.

There are fewer people in Chile than in some of the other countries, but they have made their country one of the most powerful in South America. Their schools and colleges are excellent.

Where is Santiago? Earthquakes are frequent there, and most of the houses are low, with thick walls made of *adobe*. There are many beautiful streets and parks, and many of the public buildings are large and imposing.

Find Valparaiso. It is the largest seaport on the western coast of South America. A railway is being built from this city to Buenos Aires.

Sketch South America; show the location of Chile.



A mountain cart.



Farm carts in Chile.

CHILE.

- I. LOCATION AND BOUNDARIES.
- II. SALTPETRE. Where found. Where taken. How used.
- III. PEOPLE.
- IV. CITIES.

Northern Andean Countries.

Name the five northern Andean countries. In what zone are they? In what zone is the greater part of Chile? On which slope of the Andes is Chile? On which slope is Bolivia? The other Andean countries? What great river system receives drainage from the eastern part of all the northern Andean countries? Why has the greater part of Chile abundant rainfall? Which side of the northern Andean countries receives the greater amount of rainfall? Why?

The northern countries of the Andes are much alike in surface and climate. In each, the Pacific coast is a hot, dry region crossed by short mountain streams. The Andes in each country contain many volcanic peaks so high that, although in the torrid zone, they are always capped with snow, while the plateau is so high that its climate is delightful. The broad eastern slope in each country extends into the moist lowlands of the silvas or the llanos.



Arequipa, Peru, and the volcano Misti.

In spite of the dryness of the western slope, more people live there than in the fertile lands east of the mountains. The short mountain streams have wide valleys, and furnish water to irrigate the farms, which produce abundant crops of sugar, coffee, and cotton. Between these irrigated lands are hot deserts covered with hillocks of drifting sand.

The Incas lived on the high plateaus of the central Andes. Where is Cuzco? It was the capital of the Inca empire, and was surrounded by thick walls of stone. Within was the Temple of the Sun, to which pilgrims came from every part of the empire. On an island in



Native boats on Lake Titicaca.

Lake Titicaca was another temple almost as magnificent.

After a savage war the Spaniards conquered the Incas, so that little by little their great empire melted away. But a few of their descendants still live in this region. They are skilful weavers of woollen cloths, and own herds of llamas and cattle.

Lake Titicaca is nearly half as large as Lake Ontario. Travelers now cross it in steamboats, but the natives use boats woven of rushes.

Next to Chile, Peru is the leading country of the Andes. It lies mainly in the high plateau. Sugar, silver, cotton, and wool are the chief



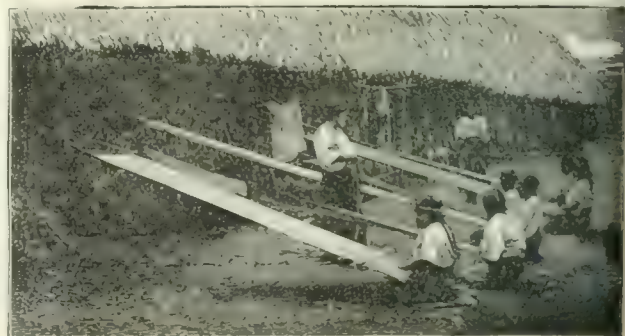
Native houses in Ecuador.

products. The cinchona tree, from the bark of which quinine is made, grows on the eastern slope of the Andes. Find Lima. It is the capital and largest city. What is the name of its seaport?

What country of the Andes has no seacoast? Some of its products go to Buenos Aires to be sent abroad. Silver, rubber, and cinchona bark are the chief exports. La Paz is the largest city. Sucre is the capital. Potosi is in the midst of silver mines.

One of these countries has the Spanish name for "equator." Why? It is the smallest country of the Andes. Cocoa is the chief product. Where is Quito? Eleven snow-capped peaks can be seen from its public square. What is the chief seaport?

Most of the trade of Colombia is on the Atlantic coast. A railway and a canal cross the Isthmus of Panama. What is its use? Coffee, silver ore, and cocoa are the chief goods sent



Natives weaving cloth in Colombia.

to foreign countries. What is the capital of Colombia?

Many years ago, a Spanish sailor found, in Lake Maracaibo, a village whose houses were built out in the water on posts. Because Venice, a city of Europe, is built out in the water in somewhat the same way, he called the village Venezuela, or "little Venice," and this finally became the name of the country. Coffee, cocoa, gold, and hides are the chief prod-

ucts. Caracas, the capital, and Valencia are the largest cities.

Sketch South America; show the northern Andean countries.

NORTHERN ANDEAN COUNTRIES.

- I. LOCATION AND NAMES.
- II. SURFACE AND CLIMATE. The high plateau. Western slope. Eastern slope.
- III. PRODUCTS.
- IV. PEOPLE.
- V. CITIES.

REVIEW EXERCISES.

Location. — What isthmus connects the two grand divisions of the Western Continent? How do these grand divisions compare in size? How far north does North America extend? How far south does South America extend? Which grand division extends farther east? West? Where do the tropics cross each? What countries are included between the tropics?

Shape. — What is the general shape of each of the Americas? In what respects are their Pacific coast lines alike? In what respects is the northern coast line of North America like that of South America? In what ways is it different? Where are the ice-bound coasts of the Western Continent? Which of the Americas has more islands? More peninsulas? More good harbors? The longer coast line?

Surface. — In what respects are the Americas alike in relief? In what part of each is a great highland region? A great plain?

Compare the Andes highland with the Rocky Mountain highland in extent; in height; in width; in mountain ranges.

Compare the great central lowland of South America with that of North America in size; location; water partings.

Compare the Brazilian plateau with the Appalachian plateau in shape and location. What small plateau in South America corresponds in position with the plateau north of the St. Lawrence in North America?

Drainage and Climate. — What three large rivers drain the Atlantic slope of South America? Which one corresponds in position to the Mississippi in North America? In what respects are the basins of these two rivers alike? What grain is a leading product of each? How does the Amazon basin compare with the Mississippi basin in size? How do the rivers compare in length? In volume of water? Which basin has the greatest rainfall? Why? How does the climate of the Amazon basin compare with that of the Missis-

issippi? Which basin has the more luxuriant vegetation? Why? Which has more people? More cities?

Compare the Pacific slopes of the Americas in width, and in number and length of rivers.

Compare the two Americas with regard to the size and number of lakes.

Forests. — Where are the forest regions of North America? Of South America? What is made from the sap of the North American pine? Of the maple? What is made from the sap of a South American tree? What use is made of the bark of the North American oak and hemlock? Of the South American cinchona tree? Where does the coffee tree grow? To what country is most of the coffee shipped?

Meat. — Where are the grazing regions of the Western Continent? In which grand division are they on a plateau? In a valley? What are the meat-exporting cities of North America? Of South America? Where is much American meat sent? How?

Grain. — Where are the grain-growing regions of this continent? What grain is chiefly grown? Where is much American grain sent?

Minerals. — What minerals are found in both Americas? Where? What minerals are more abundant in North than in South America? Where is saltpetre produced? For what is it used?

People. — In which of the Americas were the Indians found to be more civilized? What two languages are mostly spoken in North America? In South America? What form of government prevails in the Americas? What exception in North America? In South America? What regions of the Western Continent are sparsely inhabited because they are too dry? Too cold?

Railroads. — Where is Valparaiso? How is it connected with Buenos Aires? Where is South America crossed by a railroad? Where is America crossed by a canal? Give some reasons why the Amazon basin has so few railways.



EURASIA

1000 miles

Same scale as the maps of
North America, South America,
Africa and Australia.

Position, Size, and Shape.

What circle crosses the northern part of Eurasia? The southern part? What circle crosses the islands near the southeastern portion? In what zones is Eurasia? What other grand division lies in three zones? If you will trace, on tissue paper, the maps on pp. 24 and 92, and then cut them out and lay them over this map of Eurasia, you will get some idea of the size of this large grand division.

What ocean is north of Eurasia? East? South? What waters nearly surround the western part? What grand division is southwest of Eurasia? What two seas lie between Eurasia and Africa? What isthmus? A ship canal called the Suez Canal has been dug through this low and sandy isthmus. What is its use? What canal does this remind you of? Why was the Suez Canal easier to construct? What strait connects the Mediterranean Sea with the Atlantic Ocean?

The Red Sea with the Indian Ocean? What grand division east of Eurasia? What strait separates Eurasia from North America? On which side of Eurasia are there the most islands?

What is the general shape of Eurasia? The western point of the triangle is really a long, irregularly shaped peninsula

called Europe, projecting westward from the main body of the grand division, which is called Asia.

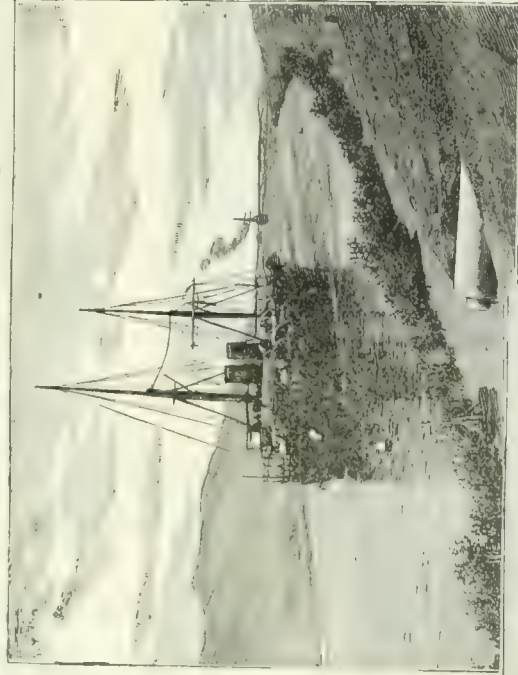
In the Western Continent we found a long mountain system in the western part, and less elevated highlands in the eastern part. The great highland of Eurasia extends in a broad V shape, and has a general east and west direction.

The western arm of the highland extends from northwest to southeast. In what direction does the eastern arm extend? The region where these two arms meet is the highest part of the great Eurasian highland, and contains the highest mountains in the world. Because one range

is always snow-capped, it is called the *Himalayas*, which means the "abode of snow."

To the south and east the plateaus of the highland region extend nearly to the ocean. Describe the general surface of the land north and west of the highland. A low mountain range divides the great northern plain, and has been chosen as the boundary between Europe and Asia. What is its name?

Some of the largest rivers in the world flow east or south from the Eurasian highland.



Suez Canal.



Scene at Port Said, at the northern end of the Suez Canal.



The Himalayas, which means the "abode of snow."

Name four on the eastern slope. Three on the southern slope.

Southwest of the Ural Mountains there is a depression containing two large salt seas. They help to separate Europe from Asia. What are their names? Some of the rivers draining the great plain flow southward into these seas; but many flow north and west to the ocean. The largest of these are in the Asiatic part of



Homes of the races in Eurasia.

the grand division, and flow into the Arctic Ocean. What are they not useful for commerce?

More than three fourths of the people in the world live in Eurasia. More than one third of these live in the small European part of the grand division. Where do the Mongolians live? Where do the Malays live? The two races occupy most of the eastern part of Asia.

The home of the white race is south of the Himalayas, and about the western base of the Eurasian highlands. The Europeans are civilized white people, and are the ancestors of most of the people

in America. Their occupations, habits, and needs are much like ours, and the greater part of our trade is with them.

REVIEW.

Position.—In what hemisphere is Eurasia? In what part of the hemisphere? What four oceans border Eurasia? In what direction from Eurasia is America? How does Eurasia compare with America in size?

Relief.—In what direction is Eurasia longest? In what general direction does its great highland region extend? Does the great highland region of North America extend in the direction of the greatest length of the continent? How is it in South America? In what respect are the highlands of the three grand divisions alike? In what respect do the highlands of Eurasia differ from those of America?

In what direction from the highland region is the great plain of Eurasia? Compare this plain with the great plains of America in direction of greatest extent. Is the division of Eurasia into Europe and Asia natural or artificial?

Drainage.—Name the rivers of the great northern plain of Eurasia. Does all of this plain slope northward? Name the rivers of Eurasia which flow to the Pacific or the Indian Ocean.

EUROPE.



Position and Coast Line.

What part of Eurasia is called Europe? In what zones is Europe?

Although Europe extends as far north as Canada, its climate as a whole is much less severe, for the mild southwest winds from the warm Atlantic blow far into Europe.

The northern part of Europe, however, is very cold. The valleys of the Scandinavian peninsula are filled with glaciers, and in the extreme north the plains are covered with snow during most of the year.

The sheltered valleys of southern Europe are exceptionally warm, because hot winds from Africa blow freely over them, while northern winds which might chill them are checked by the mountains. The southern part of Europe is the greatest fruit- and wine-producing region of the world.

We have learned that Europe is a peninsula. Its coast line is very crooked, forming many peninsulas, with gulfs, bays, or seas between. What great sea is south of Europe? What does its name mean? The people who named it

thought that there was no land in the world except that which lay around this sea. Name three seas opening into the Mediterranean. What bay is west of Europe? What sea is west of northern Europe? What sea opens into the North Sea? What sea indents the northern coast of Europe?

These waters give to the grand division a great length of coast, and they extend inland so far that no part of western Europe is very distant from the sea. The people of that region have always been great sailors and traders.

Where is the Scandinavian peninsula? What smaller peninsula is south of it? The people from these peninsulas are good fishermen and seamen. How many peninsulas extend southward from Europe? What have you learned about people from the Spanish peninsula? What is the central peninsula called? The eastern peninsula?

What group of large islands is west of the North Sea? What strait separates the largest of these from the mainland? Count the large islands in the Mediterranean. What arm of this sea contains many small islands? A group of islands is often called an *archipelago*.

Practice making a sketch map of Europe like this, but larger.



POSITION AND COAST LINE OF EUROPE.

- I. LOCATION. In what zones. How bounded.
- II. COAST LINE. Peninsulas. Indentations. Islands.



Climbing Mont Blanc, the highest peak of the Alps.

Relief and Drainage.

Through what part of Europe does the great highland region of Eurasia extend? Its highest mountains in Europe are the Caucasus in the east and the Alps in the west. The summits of both these ranges are always covered with snow, and many great glaciers creep slowly down their sides.

Eastward from the Alps extend the Carpathians. What mountains are south of the Carpathians? Westward from the Alps extend the Pyrenees. The highest peaks of these mountains are always snow-covered. What peninsula is formed by the plateau south of the Pyrenees? What branch or spur extends southeast from the western end of the Alps? What peninsula does it form? What spur extends southeast from the eastern end of the Alps? What peninsula does it form? Thus we see that the three southern peninsulas of Europe are really plateaus or spurs from the Eurasian highland.

What low mountains are in the Scandinavian peninsula? They rise abruptly from deep bays, or *fjords*, on the western shore, but descend more gently on the eastern side to a plain which slopes toward the Baltic Sea.

What part of Europe is a smooth lowland

n? What low mountains border the Euro-
n plain on the east? What mountains
der it on the southeast?

n which part of Europe is the great plain
est? In which part is it very narrow?

Where is the continental divide of North
merica? In what direction does it extend?

inning at the Ural Mountains, draw with
r pencil, across the map of Europe, a light

between the sources of the rivers which
north and west.

the sources of the
rs which flow south

east. In what di-
ion does the great

de of Europe ex-
l? Which part of

is high? Which
of it is quite

? Which river of Eu-
e flows into the

tic Ocean? Which

the White Sea? Much of the land drained
these rivers is frozen to a great depth,

wing on the surface only, during the short
mer. Name two large lakes in northern

ope. Name one river flowing into the Bal-
Which river has its source in the Alps

flows into the North Sea? Name a river
wing into the Bay of Biscay.

The largest river of Europe flows southward
n the great divide, and empties through a

ge delta into the Caspian Sea. What is its
ne? Though a much smaller river than

St. Lawrence, it is a very important route of
merce. The great plain near its source is

ow and flat that its head waters have been
nected by canals with streams flowing to the

thwest; thus goods from the Volga basin
shipped up the river to the Gulf of Finland

the Baltic ports. What other river flows
o the Caspian Sea? As this great sea or

e has no outlet, its waters are salt.

What three rivers flow into the Black Sea?
Which of them cuts through the mountains at
two points? The gorge where the Danube
rushes between the Carpathian and the Balkan
mountains is called the Iron Gate. What two
rivers flow into the Mediterranean from the
Alps? What river of the Spanish peninsula
flows eastward?

Besides lakes Ladoga and Onega there are
many smaller lakes in northern Europe. This

is a great region for
hunting and fishing.
The lakes are frozen
over for many weeks in
winter, and the coun-
try near them is flat
and dreary. In the
Alpine region, also,
there are many small
but beautiful lakes.

Make a sketch map of
Europe, showing its large
rivers.



The Kiolen mountains rise abruptly from deep bays, or fiords.

RELIEF AND DRAINAGE OF EUROPE.

- I. HIGHLANDS. Position; direction; extent. Parts: Alps, Italian and Grecian peninsulas; Pyrenees and Spanish peninsula; Carpathian; Balkan; Caucasus; Ural; Kiolen.
- II. LOWLANDS. Location. Extent.
- III. GREAT DIVIDE OF EUROPE. Location. Direction.
- IV. RIVERS OF THE NORTHWESTERN SLOPE.
- V. RIVERS OF THE SOUTHEASTERN SLOPE. Caspian basin. Black Sea basin. Mediterranean basin
- VI. LAKES. Northern. Alpine.



Lake Lucerne, in the Alpine region.



People.

Trace the outline of the Dominion of Canada, and compare its size with that of Europe. You see that the Dominion is nearly as large as the whole of Europe.

Europe is one of the smallest of the grand divisions, but it is so thickly settled that no grand division except Asia contains more people. You may think that some parts of our country are densely peopled, but parts of Europe are much more crowded, for Europe has nearly four times as many inhabitants as the whole of North America.

What part of Europe is most thickly settled? (See map below.) What parts have the fewest inhabitants? Even in the less thickly settled parts there are more people than in the whole of North America. The most highly civilized people in Europe live in the thickly settled parts. They have electric lights, railways, and telegraph lines as we have, and they can receive news from all parts of the world by means of telegraph cables which have been laid on the bottom of the ocean from Europe to each of the other grand divisions.

White men first came to live in America about the year 1500. How long ago was that? That seems a long time ago. Yet the ancestors of some of the white people of Europe lived in that grand division not only hundreds, but thousands, of years ago.

The white people who settled our country were civilized when they came from Europe and conquered the savage inhabitants whom



The dots show where the most people live.

they found here. Thousands of years ago the white people of Europe were themselves savages.

The first portion of Europe to become civilized was the Grecian peninsula. The Greeks were conquered by the Romans of the Italian peninsula, who learned much from the conquered Greeks, and became the most civilized people of Europe. They made fine roads, wrote many books, raised big armies, and conquered all western Europe. Where is France? Spain? England? The Romans conquered these countries and made good laws for the people.

Where is the German Empire? The savage tribes who lived in that region finally conquered the Romans, and learned civilization from them.

Where is Denmark? Norway? Sweden? The early people of that region were called Northmen. Why? They were bold seamen who sailed about the northern seas, murdering and robbing the people in the more civilized lands. But they gradually learned peaceful ways from the people whom they robbed.

Where is Russia? This was one of the last countries of Europe to become civilized. Most of the people are white, but there are also many of the yellow race.

Where is Turkey? The Turks belong to the yellow race. Turkey is hardly counted among the civilized nations of Europe even to-day.

A person who can talk in English and in Spanish can make himself understood in nearly all parts of America. In Europe the people of almost every country speak a language of their own, which the people of the neighboring countries do not understand. Thus, the English language is spoken in the British Isles; the German language in the German Empire; the French in France; the Spanish in Spain; the

Norwegian in Norway; and so on. So that a person who wished to talk with the people in all parts of Europe would have to learn to speak many languages.

Though the languages of the various countries of Europe differ so greatly, some of them are more nearly alike than others.

Draw a line from the eastern part of Belgium to Greece. The countries southwest of this line were conquered by the Romans, and their languages are not only somewhat alike, but are somewhat like the old Latin language that was spoken by the Romans. For this reason the southwestern part of Europe is often called Latin Europe.

Draw another line from Greece to the northern part of Sweden. The languages of the countries between this line and southwestern Europe are more nearly like the old German language than the old Latin language, and so this middle part of Europe is often called Germanic Europe. England was conquered by German peoples, and afterwards by people from France, but the English language is more nearly like the German than like the French or Latin, so the British Isles are classed with the countries of Germanic Europe.

What great country is in eastern Europe? Find Bulgaria, Servia.



Ruins of ancient Athens, in the Grecian peninsula.

THE BRITISH ISLES.



THE BRITISH ISLES.

What sea lies east of these islands? What sea lies in the midst of the group? What water lies south of England? What strait divides England from France? What channels between Scotland and Ireland, and between Wales and Ireland? Point out the mountains of Scotland, Ireland, Wales, and England. Name these four countries in the order of size. (Page 175). Which is farthest east? West? North? South? What is a firth? Point out five of them in Scot-



London Bridge.

land. Where do the Severn, Thames, Humber, Shannon, Mersey, Tyne, Ure, Great Ouse, Trent, Mersey, Arrow, Tweed, Clyde, and Forth empty? Find Cork, Waterford, Dublin, Belfast, Londonderry, Sligo, and Galway. Find Glasgow, Edinburgh, Dundee, and Aberdeen. Make a list of the chief towns and cities of England. Where are Swansea, Cardiff, and Merthyr-Tydfil?

Position and Extent.

The British Isles form an archipelago west of the mainland of Europe and consist of two large islands and over 5,000 small ones, which stretch northward for 600 miles, and 500 miles from east to west. They lie almost exactly in the middle of the land hemisphere of the world, and form the centre of the British Empire. Great Britain is the largest island of Europe and the most important in the world, for it has the best commercial position on the globe, with the shortest trade routes, and contains the commercial metropolis of the world. Ireland is about one-third the size

of Great Britain, from which it is separated by a narrow sea and two channels. Find these on the map. What waters divide Great Britain from the mainland?

Physical Features.

On the larger island the chief highlands are in Scotland, the northwest of England, and Wales. Find Ben Nevis and Snowdon on the map. The coasts of these parts are rocky and broken; deep bays and islands are numerous, especially on the west coast of Scotland. The western side of both islands is the higher, while the south and east parts are mostly level, with pretty low coasts. In Great Britain the elevated region is continuous from Land's End to Duncansby Head, but in Ireland the mountains are in detached masses, mostly near the coast, while most of the inland district is a wide plain. Find all these places on the map. Point out the Cheviot Hills. Just north of these lie the Lowlands of Scotland, and southward lies the rich farming and grazing lowland of England, extending to the English Channel. Both islands have numerous fine harbors, abundant rainfall, and large areas of fertile soil.

Drainage.

No part of the country being very distant from the sea, the rivers are small compared with those of Canada. The largest, the Shan-



Windsor Castle.

non, is not more than 250 miles long. In Great Britain the main waterparting follows the highlands near the west coast. The longer rivers, therefore, flow east to the North Sea. Owing to the great rainfall, their volume is relatively large; and as the slope of their valleys is usually very gradual, they are navigable for considerable distances. Many of them have broad, deep estuaries at their mouths. Name the most important of these.

On account of the great cities on their banks, and the amount of shipping on their waters, the Thames, the Clyde, and the Mersey must rank among the most important rivers of the world.

Numerous small lakes famed for their beauty are to be found in Ireland and in the highlands of Scotland.

Climate.

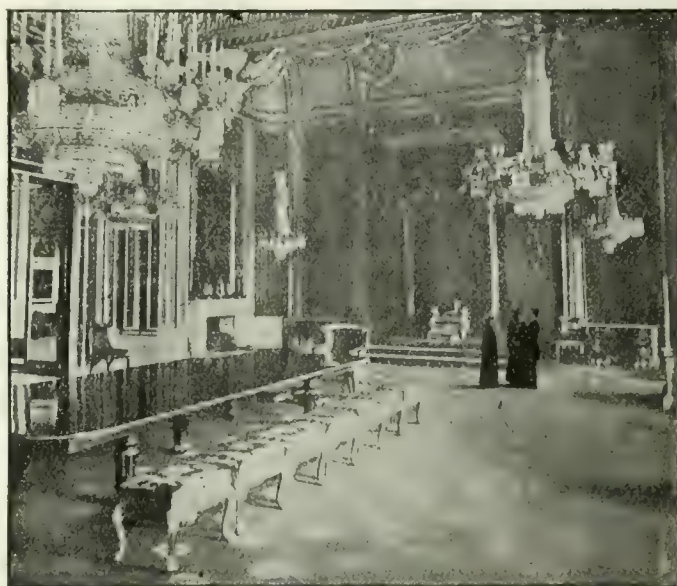
Although the British Isles are as far north as Labrador, yet the prevailing west winds which blow over the warm waters of the Atlantic keep the climate very mild in winter. Even in the north of Scotland the January temperature is much higher than in southern Ontario. Over the greater part of the country the snow remains but for a few days at a time. On the other hand the summer heat is much less than in Canada.

The ocean winds also make the climate very moist, especially in Ireland and in the highland regions of Great Britain. In these parts nearly twice as much rain falls as in eastern Canada.

Industries.

These are so numerous and varied that it is difficult to give a brief general account of them. Agriculture was long the most important occupation, and it still gives employment to a large number of the people. The rich, level plains on the east and south of England are specially adapted to grain and vegetables, and great quantities of wheat, barley, oats, turnips, etc., are grown. The rearing of live-stock is carried on extensively, and the English breeds of horses, cattle, and

swine are among the very best in the world. Owing to the thinner soil and the greater rainfall, farming in the highlands of Scotland and Wales is chiefly confined to grazing, and sheep and cattle are raised in large numbers. The pictures of Ireland are famous for their richness, and from the greenness of the vegetation comes the name, "The Emerald Isle."



Throne Room, Buckingham Palace.

Cattle, horses, and swine are shipped to England. In the north, flax is extensively grown.

The mineral wealth of Britain is very great. Coal and iron occur together, and are mined in vast quantities in South Wales, along the slopes of the Pennine and the Cumbrian mountains, and in Scotland between the Clyde and the Forth. About 220 million tons of coal are raised annually. Iron and steel are usually smelted near the mines, and a large amount of iron ore from Spain, Sweden, and other countries is imported to be mixed with the native product. Salt, lead, copper, and tin are all

ined extensively. The total annual value of the minerals produced is nearly 500 million dollars.

Cheap coal and iron stimulate every kind of manufacture. Metal goods, such as needles, pens, cutlery, firearms, engines, machinery, and ships are produced in immense quantities, and are shipped all over the world. Of equal importance is the textile industry. Cottons are manufactured most extensively in Lancashire, between the Pennines and the Irish Sea. Here coal is close at hand, raw cotton is supplied through the neighboring port of Liverpool, and the moist climate is peculiarly adapted to spinning and dyeing. On the eastern slopes of the Pennines, and in southern Scotland, woollen goods of various kinds are made. Linens are produced most largely in the north of Ireland. Manufactures of all kinds amount to one and a half billion dollars yearly.

Great Britain ranks first among the commercial nations of the world. Her trade amounts to four and a half billion dollars a year, which equals the combined value of the trade of her closest rivals, the United States and Germany. The numerous mining, manufacturing, and trading classes require much more food than produced at home; and breadstuffs and meats are imported from the United States, Canada, Russia, and Australia; butter and cheese from Canada, Denmark, and Holland; tea from India and China; sugar from the West Indies and Germany. Raw material for manufactures



The Giant's Causeway.

is also largely imported. Cotton is brought from the United States, India, and Egypt; wool from Australia, Argentina, and Cape Colony; timber from Canada, Scandinavia, and Russia. In return for these articles she sends her manufactured cottons, woollens, and hardware all over the world. Coal is also exported in large quantities.

Cities and Towns.

No other country has so many large cities within so small an area and with so much accumulated wealth. LONDON is the largest, wealthiest, and most populous city on the globe, containing, with its suburbs, over seven million people. About 40,000 ships enter the port every year, and its dockyards and basins are the most extensive in the world. It is the great emporium where the products of every country are collected and distributed, and people of every nation and language are found on its streets; it is, in fact, a little world within the world. It contains many fine public buildings and is the headquarters of the British Government and the very heart of the Empire. The Underground Railway, the Thames Tunnel, the British Museum, and the Bank of England are among the wonders of the world.

Glasgow is noted for shipbuilding, extensive commerce, and great manufactures of



Loch Katrine.

machinery, cotton and woollen goods, carpets and pottery. The estuary of the Clyde has been improved at great expense so that the largest vessels can enter. Its cathedral, university and Royal Exchange are fine buildings; the docks are enormous and do a great foreign trade.

Liverpool has immense docks, quays, and floating landings which extend miles and miles along the estuary of the Mersey. The harbor mouth is protected by a vast breakwater, and a ship canal navigable by ocean steamers reaches to Manchester. The commerce of the world comes to this port, but especially that of Canada and the United States. At Birkenhead on the south side of the river ship-building is carried on extensively.

Manchester is the world's greatest cotton manufacturing centre, and also produces woollens on a large scale. It has a large number of fine public buildings and is a great railway centre.

Leeds is noted for its woollen fabrics, and its cloth market is famous.

Birmingham and Sheffield are celebrated for the quantity and variety of their metal work, including tools, cutlery, engines, and jewellery.

Belfast, the largest city in Ireland, is engaged in linen and woollen manufactures, and in shipbuilding.

Bradford, Leicester, Nottingham, and Halifax have immense factories and are famous for the product of their looms. Kidderminster, Wilton, Axminster, Kilmarnock, and Dundee are famous for their carpets. Besides these

there are scores of places where all kinds of manufactured articles are produced, such as glassware, chemicals, porcelain, and other goods.

Bristol, Southampton, Hull, Leith, and the port of Cork have noted harbors and are great seaports.

Cardiff and Newcastle are the great ports for the shipment of coal; the latter has important gun foundries and shipyards.

Portsmouth, Plymouth, Devonport, Chatham and Milford Haven are the chief naval stations and many war ships are built at these places.

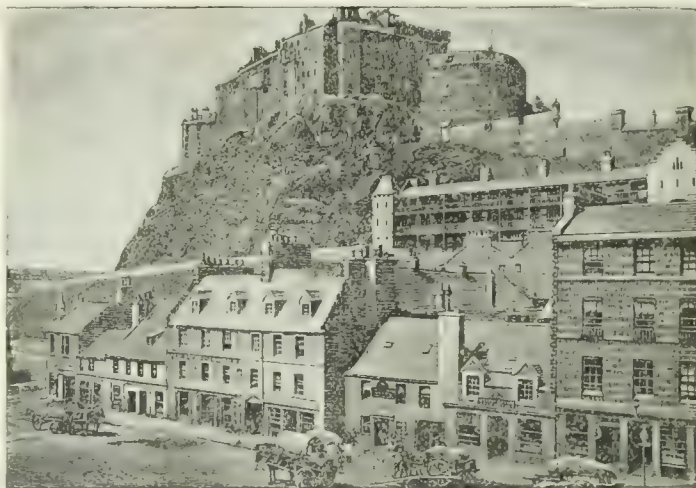
Cambridge, Oxford, Edinburgh, Glasgow, Dublin, and Aberdeen have well-known colleges and universities.

Government.

The British Isles form what is called the United Kingdom of Great Britain and Ireland. They are ruled by a Queen or King who holds his position by right of birth. His power is greatly limited by the Parliament, which

represents the people and makes the laws and levies the taxes. The King is advised in his acts by his Privy Council or Cabinet, which is responsible for its advice to Parliament, and by whom it may be dismissed at any time for mistakes or wrong-doing. Thus it is really the people who rule, and no nation has more freedom or a better government.

How does the British Empire rank among the nations of the world? (See page 167). Of what does it consist? Name some of its principal possessions in each of the continents. What colonies are inhabited principally by the people of European origin? What ones by dark races? How are the colonies of each class governed? Trace the great trade routes between Britain and her colonies. What are the chief articles of commerce carried on each? By what means



Edinburgh Castle.

tions is each of these routes protected? Name the British naval stations in Canada. By what different British routes may one travel from London to Hong Kong? From Montreal to Australia?

Where and what are the following:—Scilly, Wrath, Inch, Neagh, Solway, Orkney, Grampians, Menai, Lomond, Glessey, The Wash, Tweed, Pentland, Lewis, Trent, Boyne, Lough Neagh? Why is Labrador, although at the same distance from the equator as England, so much colder? Which part of Great Britain has the largest rainfall? Why? What effect has the climate upon the industries of the country? What are the most important minerals of the British Isles? Where are the most important mines? What parts of these islands are most densely populated? Give reasons. Name the principal places engaged in the manufacture of cottons, of woollens, of hardware, of carpets. What are the great shipbuilding centres? Name the chief seaports on the east, the south, and the west coasts of Great Britain. What reasons can you give for the rapid growth of London, Liverpool, and Glasgow? How does the government of Great Britain differ from that of the United States?

The German Empire and the Netherlands.

Find the German Empire on the map. What countries border it on the north? What countries east? South? West? In what direction does most of its surface slope? What river flows from the German Empire towards the Black Sea? To what seas do all the other streams flow? What is the name of the river in the western part? The river Rhine is famed for the beauty of the vine-clad, castle-crowned hills by which it is bordered.

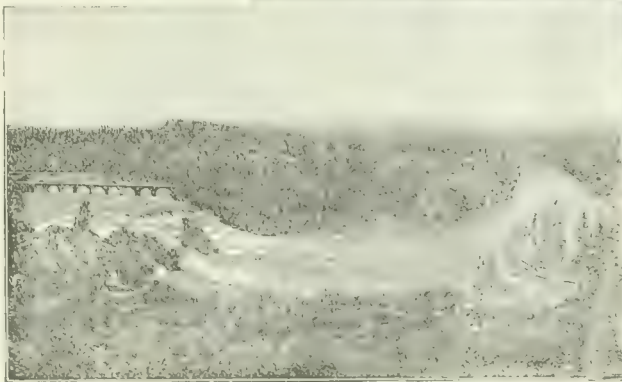
The broad plain sloping northward to the Baltic and North seas is the home of the Germans. When first known they were savage, warlike tribes. They are still carefully trained soldiers, but they are just as much noted for their learning. Their schools and universities, their art galleries, and their libraries, are among the best in the world. Many people go to Germany to study music, for

much of the best music has been composed by Germans.

The country used to be divided into a number of small monarchies, but in the year 1871 these were united to form one strong nation. Each little country takes care of its own affairs, as our provinces do, but the King of Prussia, the largest of the states, is the head of the United German nation. The people choose the lawmakers. Such a combination



Cologne, on the lower Rhine.



The Falls of the Rhine, on the border of Switzerland.

of countries in one great monarchy may be called an *empire*, and the ruler, an *emperor*. What other

empire do you know of?

The Germans are a busy and thrifty people. Every bit of land that can be made to yield crops is carefully planted, and even the steep hillsides along the rivers are dug away so as to form steps or terraces, which are set out with trees and vines. Women and girls do much of the outdoor work, for the boys must go to school, and every able young man must be a soldier for one year or more.

Grapes and potatoes are grown in the hilly lands; rye for bread, and beets for sugar in the

level lands. About a hundred years ago, a German chemist discovered that sugar could be made from the beets of the temperate zone as profitably as from the sugar cane of the torrid zone, and now nearly all the sugar used in Europe is beet sugar. Beets are grown for this purpose in all the countries of the European plain, but particularly in Germany. The sliced beet is put into hot water to extract the juice, which is then boiled down and purified as cane sap is, to separate the sugar from the syrup. The portion of the beet which is left makes good food for cattle.

Germany manufactures many things besides beet sugar. She ranks next to Great Britain among European nations in the quantity of coal mined and in the amount of iron and steel made. Woollen, cotton, and linen cloth are also manufactured. In some of the villages of Germany nearly every house is a little factory, in which the people weave cloth, or carpets, or the beautiful lace for which the Germans are famous.

Find Berlin on the map. After London and Paris it is the largest city in Europe. It is the capital of the empire. Where is Ham-



Water which collects on this land is pumped out by windmills.

burg? It is one of the greatest seaports on the mainland of Europe. On what river is Cologne? It is the centre of a great manufacturing region and is famous for the *cologne water* made there.

Many German immigrants come to our country every year.

What countries border on the Netherlands? On the coast of what sea is it? What river flows across the country? Almost the whole of the Netherlands lies in the great delta of this river. What, then, would you expect the surface of the soil of the country to be?

Netherlands means "lowlands." This state is also called Holland.

Many years ago the sea covered a large part of the country, but the people built *dikes*, or walls of earth, into so as to shut in a small low part. When the dike was finished the water was pumped out of the basin inclosed and in a short time the land thus gained from the sea was ready to be plowed and sown with grain. Many such dikes have been built so that now much of

the surface of the Netherlands, in the west and southwest, is below sea level. Any water which collects on this land is pumped out by windmills. Above the flat, green country the great sails of these windmills flutter like the wings of gigantic birds.

Canals cross almost every part of the country. Some of the larger canals are for boats and barges; some are to drain the land, and others take the place of fences. In winter, when these canals are frozen, men, women



▲ Dutch milkmaid



In Amsterdam many of the streets contain canals.

and children go about on skates, and almost all the trade is carried on over the ice.

The people of the Netherlands are called Dutch, and are nearly related to the Germans. They are noted for their industry, and there are no better farmers in all Europe. They raise grain and potatoes, but the Dutch are best known for their butter and cheese, for the moist lowlands make excellent pasturage. Not enough grain is produced to feed the dense population, but dairy products and cattle are exported.

Some of the large islands southeast of Asia, some of the West Indies, and a part of Guiana in South America belong to the Dutch. Drugs, coffee, and spices are sent from these colonies to the mother country, and from there to all parts of Europe and America.

Find Amsterdam. It is surrounded by strong dikes. Many of the

streets contain canals, so that you may look out of your hotel window and see a white sail in the street before your door. Many of the diamonds from the mines in Africa are sent to this city to be cut and polished. It is the largest city in the Netherlands, and one of the busiest seaports in Europe.

It is sometimes called the capital of the Netherlands, but the queen re-

sides, and the laws are made, at The Hague.

New York city was first settled by the Dutch.

Make a sketch map of Europe, showing the German Empire and the Netherlands.

THE GERMAN EMPIRE AND THE NETHERLANDS.

- I. LOCATION AND BOUNDARIES. Of the German Empire.
Of the Netherlands.
- II. SURFACE AND DRAINAGE.
- III. DIKES AND CANALS. Their uses.
- IV. OCCUPATIONS AND PRODUCTIONS.
- V. PEOPLE AND GOVERNMENT.
- VI. CITIES. Berlin. Hamburg. Amsterdam.

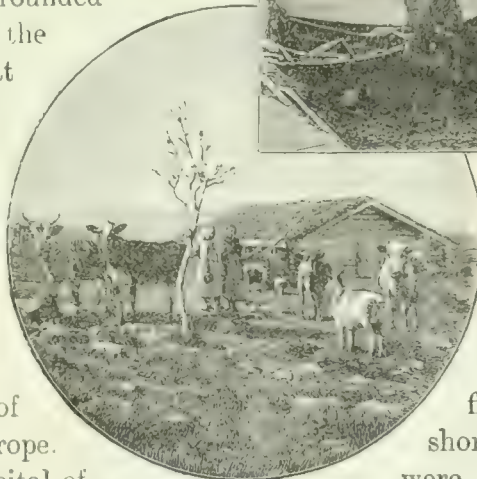
The Norse Countries.

In what part of Europe is the Scandinavian peninsula? What two countries does it contain? What country occupies a peninsula and some islands south of Sweden? What straits separate Denmark from Norway and Sweden? Between what seas is Denmark? What waters nearly surround Norway and Sweden? Which of these two countries border on the Atlantic?

Norway, Sweden, and Denmark are sometimes called the Norse countries, or countries of the Northmen. These bold sailors overran



Drying fish in Norway.



A farmyard in Sweden.

England, discovered Iceland and Greenland, and even visited America long before the time of Columbus. Many lived beside the deep bays, or fiords, that indent the rocky shores of Norway. These bays were called *viks*, and so the bold Northmen were known as Vikings.

Although Sweden and Norway are separate countries, each with its own king and parliament, yet the languages and the customs of the two peoples are very much alike.

Cattle, sheep, and grain are the chief farm products, but in Norway, where much of the surface is too rough for farming, the fisheries and the forests give employment to many people. The cod and herring fisheries of Norway are among the most important in the world. Spring is the season of cod fishing, when millions are caught, dried, and sent to different



Street in Copenhagen, Denmark.

European countries. Herring come to the coast twice a year, summer and winter. The Norway pine is one of the very best kinds of timber. Some of it is used at home for ship-building, and much of it is exported to different parts of Europe.

What are the capitals of Sweden and Norway?

Every summer travelers go to the northern part of Norway to see the beauties of the bold rocky coast, with the glacier-filled valleys, and to watch the midnight sun. In what zone is the northern part of Norway? What is meant by the "midnight sun"? (See p. 18.)

The surface of Denmark is low and sandy. The sand in the west is blown up by the wind into hills, or *dunes*, along the seashore. These are generally planted with grass, so that the roots shall keep the sand from blowing inland and covering the farms.

Grain is grown and cattle are raised on the islands; cattle, horses, and sheep are raised on the mainland. The Danes control the fisheries of Iceland and Greenland.

Find Copenhagen. It is the capital of the Kingdom of Denmark, as well as the largest city. It is noted for its libraries, museums and art galleries.

Though not nearly so many people come to Canada from these northern peninsulas of Europe as from Austria and Germany, the number of such immigrants is increasing. Many of them settle in our country, and become industrious farmers and useful citizens.

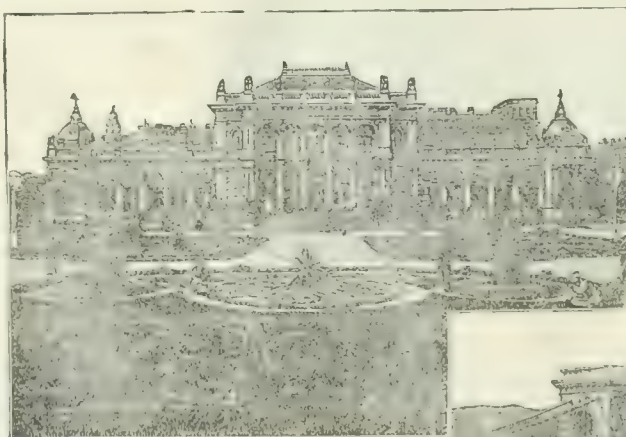
Make a sketch map of Europe, showing the Norse countries.

THE NORSE COUNTRIES.

- I. LOCATION AND BOUNDARIES. Of Norway. Of Sweden Of Denmark.
- II. SURFACE AND COAST LINE. Norway. Sweden. Denmark.
- III. OCCUPATIONS. Fishing. Lumbering. Farming.
- IV. HISTORY AND GOVERNMENT.
- V. CITIES.

Austria-Hungary and Switzerland.

What countries surround Austria-Hungary? Has it any seacoast? What part of it lies in the Alpine region? This part is called the Tyrol. What mountains in the eastern part? Most of its surface is occupied by the basin of one great river; what is its name?



Music hall and city park in Vienna.

Southeast of the German Empire is another great empire containing many German-speaking people.



Bridge over the Danube at Budapest.

This empire is formed of two countries, Austria and Hungary. *Austria* means "eastern kingdom." Part of the German Empire was once called the "western kingdom." Hungary was named after a people of the yellow race, called Huns, who came from Asia many years ago. Many people of the yellow race still live in Hungary. They long ago adopted the habits and manners of other Europeans, but still look



An Alpine peak — The Matterhorn.

and speak somewhat like the race to which they belong.

The great treeless plains of Hungary, drained by the Danube, are noted for the quantity and excellence of their wheat and corn.

There are many factories of linen cloth in Austria-Hungary, and the Bohemian glass made there is famous. The people of the Tyrol are hardy mountaineers. They are herdsmen and noted wood carvers.

What is the name of the capital of Austria-Hungary? This is one of the largest and most beautiful cities of Europe. The palace of the emperor in Vienna contains one of the



Swiss cottages on the steep Alpine slopes.

largest libraries in Europe. The people are noted for their love of music and gayety.

Budapest, on both sides of the Danube, is in the midst of the Hungarian wheat fields, and is a great flour-milling center.

What is the name of the little country between the Tyrol and France? What countries border on Switzerland on the north and on the south? What can you say of the size and surface of Switzerland?

Switzerland is one of the smallest countries of Europe. It is so high up in the Alps that about one third of its surface is always covered with snow.

The slopes of the Alps furnish much rich pasture, and the Swiss cheese is famous the world over. Where the hills are too steep for carts, the peasant women in their big wooden shoes may be seen bearing great bundles of hay on their heads down to the valleys far below.

Many of the picturesque little cottages and barns of the herdsmen look as if they might slip down the steep mountain slopes upon which they are built.

In the towns and villages of Switzerland watches, music boxes, and carved wooden toys are made. Many of these goods are exported to America. Until a few years ago the high ridges of the Alps



A Swiss street cart.

prevented the Swiss people from trading much with the people of Italy, but now the longest railway tunnel in the world has been dug through the Alps from one country to the other.

German is spoken in the north of Switzerland, French in the west, and Italian in the south. The Swiss are as brave as they are clever, and for many years have held their little country as an independent republic.

Find Geneva. It is on a beautiful lake of the same name. Zurich is the largest city of Switzerland. Bern is the capital.

Many tourists visit Switzerland to see its glaciers and grand mountain scenery.

Make a sketch map of Europe, showing Austria-Hungary and Switzerland.

AUSTRIA-HUNGARY AND SWITZERLAND.

- I. LOCATION AND BOUNDARIES. Austria-Hungary. Switzerland.
- II. SURFACE. Alps. Carpathians. Danube basin.
- III. COMPARISON. People. Industries. Governments.
- IV. CITIES. Vienna. Budapest. Geneva.
- V. SCENERY. Mountains. Glaciers. Lakes.

France and Belgium.

What country south of England? What separates it from England? What countries east of France? What country southwest? What bay west?

To what plain does most of the surface of France belong? In what direction do most of the rivers flow? Name them. Name one river flowing south. Most of these rivers are navigable and are connected by canals. Is France well fitted for internal trade?

What waters wash the coasts of France? This country is connected by railways with Middle Europe, and with Italy by a long tun-

nel through the Alps. Is France well situated for foreign commerce?

Where is the island of Corsica? It is a part of France. France owns a large part of northern Africa, too, with which she trades across the Mediterranean. What country does France own in South America?

What is the name of the small country northeast of France? About half the people of Belgium are nearly related to those of

northern France, and speak a similar language; the other half are more like the Dutch in speech, appearance, and manners.

Both in France and in Belgium the land is cultivated with the greatest skill, and produces abundantly. In some places the thrifty farmers have even drained the water from the lakes and marshes in order to cultivate the land it



Wheat harvest in France.



French washerwomen.

once covered. Along some parts of the coast of Belgium dikes have been built, as in the Netherlands, and many miles of land have been gained for grain fields and pastures in this way.

In northern France and in Belgium the cli-

mate is cool and moist, and the land is level. Wheat and sugar beets are the chief crops. No country in Europe except Russia raises so much wheat as France, but the French people eat so much bread that all the wheat raised there and more is needed for their food.

The south of France is much warmer than the northern part. The surface is rough, and instead of wheat fields there are vineyards, olive orchards, and rows of mulberry trees. The vineyards yield the most important crop of the country, and much wine is made. Some of the best olive oil comes from France, where it is pressed from the fruit of the olive tree. But one of the chief employments of southern France depends upon the mulberry tree.

Silk is a fibre that the silkworm spins. It is something like the strand of a spider web. The silkworm is a kind of caterpillar. It feeds on the leaves of the mulberry tree, and so this tree is grown with great care. When the worm is full-grown it spins a cover about itself, winding the fine strand of silk round and round its body until it is wholly covered in a case called the *cocoon*.

The cocoons are softened in hot water, and the silk fibres are wound off upon spools. The fibres are spun into silk thread, which is woven into cloth. More silk goods are made in France than in any other country in Europe.

Where is Paris? Next to London it is the largest city in Europe. Its streets are decorated with marble arches, columns, and statues, and planted with rows of



The Arch of Triumph, Paris.

trees. On summer evenings one may see people sitting at little tables along the sidewalk, before the cafés, taking refreshment and chatting gayly. In the galleries of Paris are many pictures and statues brought from Italy and other countries once conquered by the French. Students from every part of the world go to Paris to study painting, music, medicine, and science. Beautiful pottery is made near this city. Where is Lyons? Most of the silk of France is woven there. Find Bordeaux. It is in the midst of vineyards, and wine is its chief export. What is the seaport of southern France?

For a long time France was a monarchy, but it is now a republic.

The small Kingdom of Belgium has so many large cities that it is one of the most thickly peopled states in the world. Because of the careful cultivation of the land, Belgium has been called the "Garden of



Market place, Lyons.



A milk cart in Brussels.

Europe;" because the neighboring nations have fought so often on its territory, it has been called the "battle ground of Europe."

What is the capital? It is noted for the carpets and the lace made there. Antwerp is a large and busy seaport.

In former times some of the best people of France came to North America to live. Many of them settled in South Carolina, and in the cities of New Orleans and Mobile, where their descendants are among the most prosperous citizens.

Make a sketch map of Europe, showing France and Belgium.

FRANCE AND BELGIUM.

- I. LOCATION AND BOUNDARIES. France. Belgium.
- II. SURFACE AND DRAINAGE. France. Belgium.
- III. CLIMATE AND PRODUCTIONS. In the northern part. In the southern part.
- IV. SILK INDUSTRY. Mulberry tree. Silkworm. Manufacture.
- V. CITIES. Paris. Lyons. Bordeaux. Brussels.

Spain and Portugal.

What two countries occupy the peninsula at the southwest extremity of Europe? What country and water north of Spain? What waters east and south? What group of islands east? These islands belong to Spain. What water west of Portugal?



Spanish milkman.

The Spanish peninsula is a high plateau crossed by several mountain ranges. What range between Spain and France?

The plateau is hot in summer and cold in winter, and so dry and rough that both farming and commerce are difficult. So the peninsula is the least thickly set-



Street scene in a Spanish city.

tled part of western Europe. (See small map, p. 111). Most of the people live on the slopes near the coasts, where there is more rainfall, and in the deep river valleys of the interior, where water can be had to irrigate the farms. Which river flows southeast? Which rivers flow westward?

These slopes and valleys are among the best of fruit-growing lands. Oranges, lemons, limes, English walnuts, and almonds are sent to the countries of northern Europe. Olives and olive oil are also exported.

Many kinds of grapes are grown, so this is a great wine-producing region. A great many of the grapes are dried into raisins on the warm ground. Cork is also produced. It is the bark of a kind of evergreen oak.

Peas, onions, and garlic are raised, and with Indian corn, which is raised in the west, form the chief food of the people. On the dry highlands large herds of merino and other kinds of sheep find pasturage.

The great wealth of Spain is in its minerals. Its copper, lead, and quicksilver mines are very rich, and much valuable iron ore is



Spanish peasants.

shipped to England, chiefly from the port of Bilbao. Where is this port?

Spain is a kingdom, but Portugal is a republic. After the discovery of America, Spain was rich and powerful; she owned much of Europe and nearly all of America, and had ships on every sea. The Portuguese also were great sailors, and had rich colonies in those days. They were the first to sail to Asia around the south end of Africa, and Magellan was a Portuguese sailor. But both countries have lost most of their colonies, and are now neither very rich nor very powerful.

What strait separates Spain from Africa? On the Spanish shore of this strait is a high cape called the Rock of Gibraltar. Many years ago the English drove the Spaniards away from this rock and made there the strongest fortress in the world, which Great Britain still holds. This fortress is important because it commands the narrow entrance to the Mediterranean Sea.

Madrid, the capital and largest city of Spain, is in the desolate plateau region. The nights are almost always cold, but the days are often so warm that nearly every one takes a *siesta*, or nap, in the middle of the day. Barcelona is the greatest commercial city. Where is it? Find the capital of Portugal. Where is Oporto? It is in a great wine-producing region.

Make a sketch map of Europe, showing Spain and Portugal.

- SPAIN AND PORTUGAL.**
- I. LOCATION AND BOUNDARIES. Spain. Portugal.
 - II. SURFACE AND CLIMATE.
 - III. PRODUCTIONS. Fruits. Cork. Minerals.
 - IV. PEOPLE. Distribution. History. Cities.



An Italian cart.

Italy.

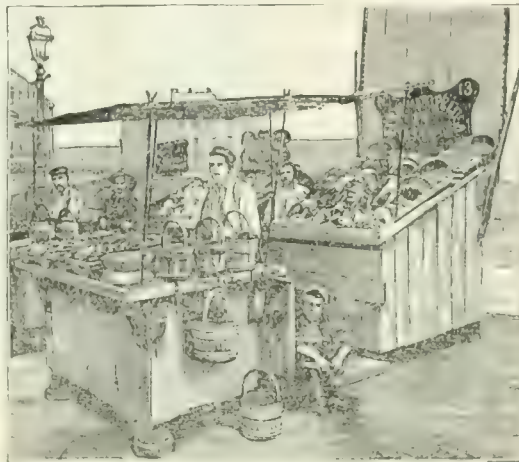
What is the middle peninsula of southern Europe? It is occupied by the Kingdom of Italy. By what waters is it nearly surrounded? What islands west? To what country does Corsica belong? What island southwest? Sardinia and Sicily are parts of Italy. What high mountains on the northern border? What range of mountains extends the whole length of the peninsula? Where is the river Po?

Of all the countries of Europe, Italy is the most famous. More than twenty-five hundred

years ago some people settled near the middle of the west coast of Italy and built a village, which grew into the great city of Rome. The city became the centre of a strong nation which conquered all of Italy. As

years went by, the Romans conquered all southern and western Europe, and a large part of Asia and northern Africa, and formed the great Roman Empire. Afterward parts of this empire rebelled and formed independent states, and other parts were conquered and annexed by other nations, so that the Roman Empire was entirely destroyed. Even the Latin language used by the Romans ceased to be spoken.

Italy is the state in which the language and customs are most like those of the Romans. The farmers of Italy are industrious, and the merchants are good traders. Many of the educated people are skilful in painting and sculp-



An Italian market place.

ture. All the people are fond of music, and love their bright, sunny land.

Wheat, corn, oats, and rice are the chief crops in the plains of the Po and in the level river valleys. More raw silk is produced than in any other country of Europe. Oranges, olives, wine, and chestnuts are sent to other parts of Europe and to America.

Find Rome. It is the residence of the King of Italy, and of the Pope, who is the head of the Roman Catholic Church. The Pope's palace, called the Vatican, is near St. Peter's, the largest church in the world. Rome is famous for the ruins of its ancient buildings. Among these is the Coliseum, which was used by the ancient Romans as a sort of circus. It could hold as many people as would make a good-sized city.

Where is Naples? It is the largest city of Italy. Much macaroni is exported from this city. Near by are the ruins of Pompeii, a city buried nearly two thousand years ago by ashes falling from the neighboring volcano, Vesuvius. After hundreds of years the ruins were accidentally found, and much of the old city has been uncovered.



Ruins of the Coliseum, Rome.

Find Milan. It is the chief market in the plain of the Po.

Where is Venice? In the days of Columbus it was the greatest commercial city in Europe. It is built on some low islands several miles

from the shore. Canals take the place of the main streets, and the people go about in boats instead of in wagons or street cars. The paved streets are very narrow, some of them not more than three feet wide. The city is noted for beautiful glassware, jewelry, and lace.

The Italian immigrants in this country are among our most thrifty and



In Venice the people go about in boats.

industrious laborers. Nearly all of our street "organ-grinders" are the music-loving Italians, and many of the fruit stands at the street corners in our large cities are kept by men or women who were born on the warm fruit-producing slopes of Italy.

Make a sketch map of Europe, locating Italy.

ITALY.

- I. LOCATION AND BOUNDARIES.
- II. SURFACE. Mountains. Po basin.
- III. PEOPLE AND OCCUPATIONS.
- IV. GOVERNMENT.
- V. ROME. Former greatness. Present condition.

Greece.

Name the eastern peninsula of southern Europe. What mountains are partly contained in it? What water east of Greece? Most of the islands in the Ægean Sea belong to this state.

When Rome became an empire, and spread her language, laws, and customs all over west-

ern Europe, the Romans really taught the civilization they had learned from the Greeks, and therefore when Europeans settled America, it was the Grecian civilization which they brought with them. So the civilization which we have to-day started in ancient Greece.

All that remains of the Greek nation is the small kingdom south of the Balkan plateau. The language is much like that of ancient Greece, and the people are still among the foremost traders and sailors of southern Europe, but almost all the nations that learned civilization of the Greeks are now more prosperous than they.

The country is mountainous, and the very crooked coast line is fringed with mountainous islands, several of which are volcanic.

Wheat and barley are cultivated in Greece, and excellent figs and honey are also produced; but the most important product is the small dried grapes which in commerce are known as *currants*.

Athens, the capital, is noted for the ruins of its beautiful ancient buildings (see picture on p 112); but most of the beautiful statues which ornamented these buildings have been removed to the museums of London, Rome, or Paris.

Make a sketch map of Europe, showing Greece.

GREECE.

- I. LOCATION AND BOUNDARIES.
- II. SURFACE AND PRODUCTIONS.
- III. CIVILIZATION. In ancient Greece. In the Roman Empire. In America. In modern Greece.
- IV. ATHENS.



Greek in native dress.

Russia.

What is the most eastern country of Europe? Compare it with the other countries in size. What land east of Russia? What waters north? What waters and countries west? South? What sea or lake southeast? Is the surface mostly flat or mountainous? In what parts are there mountains? In what two directions does the surface slope? Trace on the map the main divide of Russia.

Russia is the European part of the great Russian Empire, which extends eastward over northern Asia and southward beyond the Caucasus Mountains.

Through what waters must a vessel pass in sailing from Odessa, on the Black Sea, to St. Petersburg? From St. Petersburg to Archangel, on the north coast? Because coasting trade from one coast of Russia to the others is so difficult, the rivers of the country are greatly used for commerce, and they are connected by canals across the

main divide, so that goods can be carried by river and canal from the Black Sea or the Caspian to the Gulf of Finland or the Arctic Ocean.

In what zone is the greater part of Russia?



A Russian carriage.



Russian farmers.

In what other zone is part of it? Nearly all of Russia is farther north than the Great Lakes of America. Even in the south the rivers are frozen over for several months in winter. During the short, warm summers of northern Russia only the surface of the ground thaws, and as the water cannot sink into the frozen earth beneath, the whole region becomes

a swamp called a

tundra. Coarse

moss covers this

region. Farther

south a great for-

est region occu-

pies nearly one

third of Russia.

In the southwest

are open plains,

on which great

quantities of food

stuffs are grown.

This is therefore

the most thickly

peopled part of

the country. In

the southeast so

little rain falls that the fertile prai-

ries give place to arid plains, called

steppes.

Most of the people in Russia be-

long to the white race. But some

belong to the yellow race, as the

Finns, who live north of the Gulf

of Finland and are the dairymen

and lumbermen of Russia; the

Lapps and Samoyedes in the far north, who are

hunters and fishers; and the Calmucks and

Cossacks in the far south, who raise great herds

of sheep, cattle, and horses.

Farming is the chief occupation of the people, and grain and flax are the chief crops. More

rye is grown than in any other country, and

rye bread is the common food in Russia.

Much more wheat is raised than is needed at

home, so Russia, like our own country, sells great quantities of this valuable food to the thickly settled countries of western Europe.

Much of the flax is sold to Great Britain, to be made into linen cloth. But in southern Russia the flax is grown for its seed, from which linseed oil is made.

The farmers rarely live on their farms as in this country. A number of families are grouped into a village, or *mir*, which holds the surrounding farm lands and divides them among the villagers.

There are fewer mills and factories in Russia than in western Europe. Cotton and woollen cloths are made in some of the large cities, but most of the cloth used by Russian peasants is woven by their families during the long winters.

Petroleum is an important production of Russia. Find Baku. Although south of the Caucasus Mountains, it is in

Russia. In the

neighborhood of

this town are the

largest petrole-

um wells in the

world. More pe-

troleum is pro-

duced in this

region than any

where else except

in the United

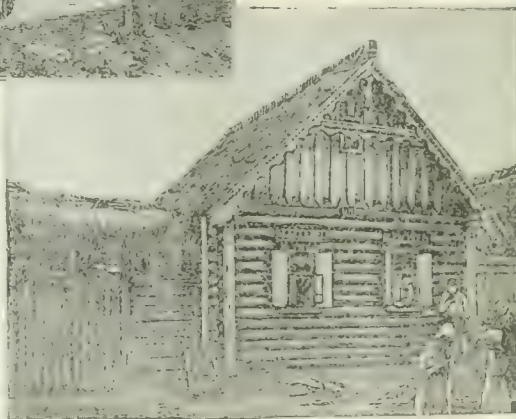
States. Part of

it is shipped by

the Caspian and



A Russian church.



Farmer's cottage in Russia.

Volga to the interior of Russia, and part by railway to Batum, on the Black Sea, for export.

There is much trade in Russia by means of fairs, to which merchants come from other parts of Europe and from Asia. Find Nizhni Novgorod. A fair is held here every summer, where many thousand people buy their stocks of goods. For three months, when the fair is in progress, the river is filled with boats, and the

city with a bustling crowd of people, bargaining in its thousands of shops, or visiting its cathedral, its hotels, or its theatres. During the other nine months, not a human being is in sight in that part of the city: all is silent, and weeds and grass grow in its deserted streets.

The ruler or head of this great empire is called the *czar*. In 1905, Russia became a representative, hereditary monarchy, but the czar still exercises much power in the state.

Find Petrograd. It is the capital of Russia, and one of the largest cities of Europe. Where is Moscow? It is the railway centre of Russia. Odessa is a great grain market and the shipping point of southern Russia.



Scene in Constantinople.

Make a sketch map of Europe, showing Russia

RUSSIA.

- I. LOCATION AND SIZE.
- II. PLAIN. Extent. Surrounding mountains. Bordering seas. Regions: tundra, forest, prairie, steppe
- III. OCCUPATIONS. Farming. Grazing. Manufactures. Mining.
- IV. TRADE. Routes. Fairs.
- V. PEOPLE AND GOVERNMENT.

States of the Balkan Peninsula.

What seven small countries that you have not yet studied adjoin one another in southeastern Europe? What sea is east of this region? What sea south? What sea west? What river flows through this region to the Black Sea? What mountains border on this part of the Danube basin to the south? The part of Europe to the southeast of Austria-Hungary is often called the Balkan Peninsula? Why?

Turkey is the only non-Christian country in Europe. The ruler is an absolute monarch, and is called the *sultan*.

Many hundred years ago, the Turks, a fierce race of yellow people who had conquered much of western Asia south of the Black Sea, crossed

over into Europe and added the whole Balkan peninsula to the great Empire of Turkey.

Most of the people of the Balkan peninsula belonged to the white race, and were Christians, while the Turks belonged to the yellow race and believed in the Mohammedan religion; thus the customs of the two peoples were very different.

The Turks were cruel to the Christians, and robbed and

oppressed them. Hence the Christians were discontented, and often tried to free themselves from Turkish rule.

About eighty-five years ago, Greece, aided by other Christian countries of Europe, succeeded in becoming independent. Afterwards

Rumania, in the same way, freed herself from Turkey and became a kingdom. Still more recently Serbia and Montenegro became independent monarchies. In 1908 Bulgaria declared her independence, and made her reigning prince king. In 1913, on the conclusion of the first Bal-



Turkish Water Carrier.

kan war, Albania was declared to be an independent state by the European powers.

Thus all that is left of Turkey in Europe is a small territory between Bulgaria and the Sea of Marmora, about half the size of Nova Scotia, though the Turkish Empire

still includes much of western Asia. About half the people in European Turkey are Christians, and they are still trying to free themselves from the Turks.

Rumania and much of Bulgaria lie in the fertile valley of the Danube, and from them great crops of grain are sent down the river for export. There are many vineyards and rose farms on the slopes of the Balkan Mountains, and wine and the famous perfume, attar of roses, are made there.

The language of Rumania, unlike the languages of the neighboring countries of Eastern Europe, is something like the Latin, and it is thought the people are the descendants of Roman colonists who settled in that region nearly two thousand years ago.

What is the capital of Rumania? Of Bulgaria?



A fruit peddler in Bukharest.

Servia and Montenegro are rough and mountainous, and are largely covered with forests. Corn forms the chief food of the people, and is grown in the river valleys. The wealth of the country consists in the herds of swine and cattle. What is the capital of each country?

The people of Turkey have been so badly governed that they are wretchedly poor. They have little wealth besides the forests and the herds of cattle and sheep. Small amounts of grain, tobacco, silk, and wine are produced. Turkish carpets and rugs made by hand are sold in Europe and America.

What sea is between the Black Sea and the Ægean Sea? What strait connects this sea with the Ægean Sea? With the Black Sea? What city is on the Bosphorus? Constan-



A Turkish cart.

tinople is the capital of the Turkish Empire. It contains the beautiful palaces and gardens of the sultan, and many fine *mosques*, or Mohammedan churches; but most of the houses are miserable hovels built of wood, and in consequence widespread conflagrations are common. The streets are narrow, filthy, and without sidewalks. The fine harbor is called the Golden Horn.

Make a sketch map of Europe, showing the Balkan peninsula.

BALKAN PENINSULA.

- I. LOCATION AND BOUNDARIES.
- II. THE TURKS. Character. Religion. Government.
- III. STATES OF THE PENINSULA. Names. Products.
- IV. CONSTANTINOPLE. Location. Buildings. Streets.



Sheep on the steps of a Turkish mosque.

REVIEW EXERCISES.

Position and Climate.—What and where is Europe? How would you go from your home to its largest city? Which is farther north, Europe or the inhabited part of Canada? How do they compare in climate?

Food for the People.—How does Europe compare in food with the Dominion? Which has the more people? What small kingdom in Europe is one of the most thickly peopled states in the world? Does Europe produce the food for all her people? Why not?

Where are the grain-growing regions of Europe? Why are they suited for grain growing? What grains are raised? In what river basins of America is grain grown for European countries? Where are the grazing regions of Europe? Why are they suited for grazing? From what countries of America is meat sent to Europe? What are the fishing regions of Europe? What countries are famous for cheese? What countries grow beets for sugar making? Why do they not grow sugar-cane? What are the great wine-making countries of Europe? Where are raisins made? Where do oranges and lemons grow? Olives? Walnuts and almonds? Why do these fruits grow in this region?

Manufacture.—In what countries of Europe is manufacturing a leading industry? Does Europe manufacture more goods than she uses? Name some manufactured articles which we get from Europe. Name a raw material shipped from the Southern States to Europe. What is made of it? What countries of Europe manufacture cloth? Why are they manufacturing countries? Where is Manchester? What is manufactured there? What country of Europe produces most silk? What is it? Where is Lyons? What countries produce linen? What countries manufacture iron and steel? Where is Glasgow? What country is noted for its glass-ware? For its watches? Where is Geneva?

Transportation and Communication.—Are the rivers of Europe as large as those of North America? Which has more inland seas, Europe or Canada? Name the seas on which you think there are large numbers of vessels. Where are they going? Why? What city on the Bosphorus? What city on the Black Sea is the main market for Russia? (Odessa.) What city on the North Sea is the leading port for German steamship lines? (Hamburg.) What is the largest seaport in the Netherlands? (Amsterdam.) Where is Liverpool? What facilities has Europe for internal trade? (Canals and Railways.) How is it connected with America? What nation first built roads in Europe? (Romans.) What famous mountains have been tunneled? Why?

Government.—What does the British Empire include? (Page 168.) What and where is its capital? What is its form of government called? What is the form of government in the Dominion? How does a monarchy differ from a republic?

Name and locate the five empires in Europe. What is the capital of each? What is the form of government in Spain? Portugal? Norway? Sweden? Denmark? The Netherlands? Belgium? Italy? Greece?

Name the republics in North and South America. What little, mountainous country of Europe has long been a republic? Where is it? What large and very important country of Europe is a republic? Name the republics of North America. Name the republics of South America. What were these countries before they became republics? What is Canada now?

Civilization.—Are the people of America savage or civilized? From what grand division was civilization brought to America? What savage race owned America before the Europeans took possession of it? Were the Europeans themselves ever in a savage condition? In what part of Europe did the people first become civilized? Where is the Grecian peninsula? What people conquered the Greeks and learned civilization from them.

Tell five things which are done in the Dominion to-day which the Indians have not yet learned to do. Do uncivilized people build large cities and fine buildings? What great city did the Greeks build? What was the most famous city in the Italian peninsula?

Into what countries of Europe did the Romans carry their civilization? What is true to-day of the languages spoken in all the countries of southwestern Europe? In what countries of North and South America do the people speak the Spanish language? The Portuguese? What great country of Europe has been the last to learn civilization? Name one leading industry of western Europe and northeastern United States which is as yet but slightly developed in Russia. What European country is hardly yet counted among civilized nations? What countries now occupy the Balkan peninsula?

Name the three chief cities of Europe in the order of their size. (Page 179.)

Make a list of the capital cities of Europe.

Name the great European seaports, and tell what ships take away from each.

Name the great European manufacturing cities, and tell what is made in each.



EURASIA

1000 MILES

Same side as the maps of North America, South America, Africa, and Australia

Position and Coast.

What is the eastern part of Eurasia called? Follow with your pencil the boundary between Asia and Europe, naming the mountains, river, and seas which lie on this boundary. (See map, p. 104.) How does Asia compare with Europe in size? Asia includes about one third of the land surface of the world.

In what zones is Asia? In what zone is the greater part? What ocean is north of Asia? What ocean is east? What strait separates Asia from North America? What ocean is south of Asia? What two seas are west of southwestern Asia? What isthmus connects Asia with Africa? What canal crosses this isthmus? What is the use of this canal? Name the strait through which the Red Sea opens. This name means "gate of tears."

What great bay and sea are south of Asia? Name six seas that wash the eastern shores of Asia. How are most of these seas separated from the rest of the Pacific Ocean? Name two



A pass in the Caucasus Mountains.

peninsulas of eastern Asia. Korea is now called Chosen. Name three peninsulas of southern Asia.

On which side of Asia are there many islands? From Formosa northeast to Kamchatka stretches a long chain of islands. What is its name? Where are the Philippine Islands? Sumatra, Borneo, and Celebes?

Many of the islands east and southeast of Asia contain volcanoes, from which terrible outbursts sometimes occur.

Practice making a sketch map of Asia.

POSITION AND COAST OF ASIA.

- I. LOCATION. Zones. Boundaries.
- II. EAST COAST LINE. General direction. Projections. Indentations. Islands.

Surface.

(With this lesson use the map on p. 104.)

Does most of Asia lie in the highland or in the lowland part of Eurasia? Find the region from which all the high mountain chains seem to extend. This high mountain-crowned region is called the Pamir plateau or the "Roof of the World."

From the Pamir plateau a succession of mountain ranges stretches westward to the Black Sea, and three chains extend eastward—one to the northeast, one to the east, and one to the southeast.

What is the westward range



called east of the Caspian Sea? South of the Caspian Sea? Between the Caspian and the Black seas? From these ranges a low plateau extends southward nearly to the coast. A broad lowland, near the head of the Persian Gulf, divides this plateau into two parts. What is the eastern part of the plateau called? The southwestern part? What plateau is south of the Black Sea?

The mountain chain extending northeast from the Pamir plateau consists of many short, irregular ranges, known by different names in different parts. Name three of these ranges. The mountains extending south-east from the Pamir plateau are the loftiest range on the earth. Mount Everest, their highest peak, is over five miles high. What range of mountains extends eastward from the Pamir plateau?

Between the Himalaya Mountains and the Kuenlun is the highest large plateau in the world. It is twice as high, and almost as large, as the western highland of the United States. What is its name? What desert is between the Kuenlun and the Altai Mountains? It is a low plateau. What do you think about its climate? The plateau of Tibet is also dry, but being much higher is much colder than the Desert of Gobi.

These dry highlands produce little wealth, except animals valuable for their wool and hair. The herding of sheep, goats, camels, and yaks is the chief occupation. The yak is a hairy animal much like the ox.

The highlands are so broad and the mountains so lofty that they form a nearly impassable barrier between northern and southern Asia.

Like the peninsulas of Europe, the Asian peninsulas are either mountainous plateaus or spurs from the Eurasian highland.

The islands off the east coast of Asia are all really mountain ranges, the valleys between being covered by the ocean, and forming partially inclosed seas.

Northern Asia is a great lowland plain much like northern Europe. Along the Arctic Ocean is a frozen, moss-grown tundra; farther inland

there are extensive forests; still farther south are open prairies, which in the southwest give place to steppes, covered with coarse grass.

Among the eastern and southern highlands are many broad lowland plains. Such are the plains of the Hoang, the Ganges, and the Indus rivers.



A flock of sheep in Tibet.

Model Asia; show mountains, plateaus, and lowlands.

SURFACE OF ASIA.

- I. HIGHLANDS. Extent. General direction. Plateaus: Pamir; Tibet; Gobi; Iran; Asia Minor; Arabia; Dekkan. Mountains: Himalaya; Kuenlun; Thibet; Shan; Hindu Kush. Peninsulas.
- II. LOWLANDS. Northern plains. Plains of the Hoang; Plains of the Ganges and Indus.

Drainage.

In what direction do the rivers of the great northern plain flow? Name the three large rivers. All these rivers have branches flowing nearly east or west, and with head waters so near each other that it is only a short distance across the divides. The hunters and fur traders go from Russia far into this plain by means of these rivers.

Name the four largest rivers of the Pacific slope. The Amur flows through one of the best wheat-growing regions of Asia. The Hoang, or Yellow River, is sometimes called "China's sorrow," because of the loss of life and property caused by its overflows. The Yangtze and the Mekong rise in the high plateau of Tibet and descend to the lowlands in deep gorges or canyons, through which few white men have ever passed.

What two rivers flow into the Bay of Bengal through the same delta? What river flows into the Arabian Sea? These three rivers drain both the north slope and the south slope of the Himalaya Mountains. What rivers flow into the Persian Gulf?

Beginning on the Ural Mountains, draw a line around the great basin whose rivers do not reach the ocean. This interior basin occupies about one quarter of Asia, and contains many large salt lakes. Why are they salt? Lake Aral is nearly as large as Lake Superior. Lake Balkash is another large salt lake.

There are fewer freshwater lakes in Asia than in North America. The only large one, Lake Baikal, is about half as large as Lake Superior. What river is its outlet? Much trade is carried over this lake by means of steamboats during summer and by ice sleds in winter.

Sketch Asia; locate its large rivers.

DRAINAGE OF ASIA.

NORTHERN SLOPE. Ob. Yenisei. Lena.

EASTERN SLOPE. Amur; Hoang; Yangtze; Mekong.

SOUTHERN SLOPE. Brahmaputra; Ganges; Indus; Tigris and Euphrates.

LAKES.

People.

What thickly peopled islands lie east of Asia? What two regions contain most of the people on the mainland? What parts of Asia contain very few people?

The climate of southeastern Asia is so warm and moist that food plants grow there in abundance. Nearly half the people of the world live in this part of Asia.

Where it is too cold or too dry for food plants to thrive, few people are found.

In Asia, even more than in Europe, the people in the various countries differ in language, in religion, and in manners and customs. There are at least three totally different races in Asia.

The people of the yellow race live mainly in the eastern and northern parts of Asia. (See map, p. 106.) How do they differ from people of the white race? What people of this race live in Europe?



The dots show where most of the people in Asia live.

The people of the brown race live mainly in the islands southeast of Asia, and in the Malay peninsula. Many of them are still savages, yet they are generally easy to civilize.

Most of the people of India and of southwestern Asia belong to the white race, though they have darker skin than the people of Europe. It is believed by many that originally the largest branch of the Caucasian or white race lived in the highland region in the neighborhood of the Hindu Kush Mountains, and that from this region they spread south-eastward into India, and westward into the various countries of Europe.

PEOPLE OF ASIA.

- I. DISTRIBUTION. Northern plain. Plateau and desert belt. Alluvial plains.
- II. RACES. Caucasian. Mongolian. Malay.

Siberia.

What is the northern division of Asia? In what zones is it? What waters are north of Siberia? What waters east? From what division of North America is it separated by Bering Strait? Describe the surface of Siberia. The drainage.

Siberia is part of the great Russian Empire. Many of the people are of the yellow race. In the north they are hunters and fishers, and in the south they are herders and farmers. But many white people have come into Siberia from Russia. The farmers of Russia can get land in



Siberian sledges.



A Siberian village in winter.

Siberia free from rent, and hence many of them have moved eastward and settled there. In what direction has the settlement of our country advanced?

At one time the Russian Government used Siberia as a place to which those who offended

were exiled, often for what we in Canada would consider very trivial offences, as having said or done something that the Russian rulers did not like. Of late, however, the government has become much more tolerant of opinions with which it did not agree

and the result is that the people enjoy a fair and increasing measure of liberty.

The mines are the chief wealth of Siberia; they yield much gold, silver, and platinum, a metal somewhat like silver. Some of the best graphite, of which lead pencils are made, comes from Siberia.

In the cold northern part of Siberia are found the bodies of huge hairy elephants frozen fast in the icy soil, and preserved by the cold. Their tusks are sold for ivory.

Central Siberia, like central Russia and central Canada, is a vast



Merchants of Bokhara.

rest region where many animals are trapped for their valuable furs. There are many moose and wolves in these forests.

In the more open region south of the forests a railroad has been built across the whole country from east to west. Most of the inland traffic is now carried on by caravans or parties of traders with pack animals.

Much of the tea used in Russia is carried from China by these caravans.

Find Tashkend. It is the largest city of Russian Turkestan. Coarse cotton cloth and leather goods are made in the towns and villages near by. Khiva and Bokhara are native states which really belong to Russia. Where is Irkutsk? It is the chief market of eastern Siberia. Find Vladivostok. It is the great seaport of the Russian Empire on the Pacific Ocean and the eastern terminus of the great Siberian railway.

Sketch Asia; locate Siberia.

SIBERIA.

- I. LOCATION AND SURFACE.
- II. CLIMATE.
- III. PRODUCTIONS. Minerals Ivory. Furs.
- IV. RUSSIAN EXILES.

Chinese Republic.

In what part of Asia is the Chinese Republic? In what part is most of it? Of what five countries is it composed? Which of these countries lie in the highland region? Which lie partly in the lowlands? What two great rivers drain the greater part of China? Where do they empty? Into what waters do they empty? Of what ocean are these waters a part? The Hoang River has a great delta.

The Chinese Republic is somewhat larger than Canada, and is the home of the greater part of the yellow race. The four countries belonging to China in the plateau

and desert region of central Asia cover the largest part of the republic, but contain few people. The fertile and thickly settled lowlands of China proper contain nearly one-fourth of all the people in the world.

China is one of the oldest of nations. The Chinese printed books and made gunpowder long before these inventions were known in Europe; yet, until recently, they have made little progress, but live very much as their ancestors did thousands of years ago. They have very little machinery, and what they have is awkward and old-fashioned.

Until a few years ago the Chinese were not allowed to leave their country, nor were strangers allowed to visit it.

The Chinese dress in loose robes or jackets, with full sleeves, which they use as pockets. Their shoes have thick white soles. They shave off their hair except a lock on the crown, which they wear in a long braid. Chinese ladies can seldom walk well, because when they were young their feet were kept tightly bandaged to prevent them from growing. Thus their feet, though small, are terribly deformed.

The Chinese are very polite to one another. Even after he has grown up, a Chinaman obeys his parents while they are alive and worships them after they are dead. Although the Chinese seem stupid in not adopting new ways, they are very clever in doing things in their old-fashioned ways, and they are very industrious.

Recently there has been an awakening of the people, and the Chinese have been rapidly changing their customs. They now send many of their able young men to America and Europe to learn about industries, and many



A Chinese Girl.



A Chinese Barber.

Chinamen come to Canada and the United States as labourers.

In China proper farming is the chief occupation. Almost every foot of the land is cultivated, and along the rivers great rafts made of a kind of tall reed or cane, called *bamboo*, are covered with earth, and used as gardens. Many thousands of people live on these rafts and on flatboats which are moored with them.

On the hill slopes tea and many fruits and vegetables

have changed their form of government from an absolute monarchy to a republic, so that the people may have a share in it. They have entered upon an era of railway construction, and are introducing modern machinery into all their

manufacturing and agricultural operations.

The Chinese make many excellent and beautiful things, but mostly by hand. The best pottery and porcelain used to come from China, and to this day we call it *china ware*,

even though it is made in Great Britain. Chinamen generally dress in cotton cloth made in China. It was from the Chinese that the world learned to make silk, and much of the finest and softest silk cloth still comes from China; but most of the silk exported from China is raw silk, which is manufactured into cloth, ribbon, or thread in Europe or America.

Manchuria is crossed by forest-covered mountains. Between them are many wide and fertile valleys, in which much wheat is raised. Mongolia and Chinese Turkestan are mostly desert or arid land, where the people live in a half



Picking tea in China.



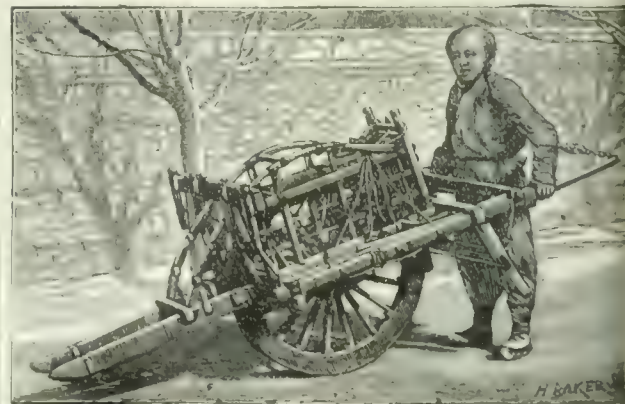
Planting rice in China.

are raised; but in the lowlands barley and rice are the chief crops. The rice is grown on land that can be easily flooded, and thousands of men and women may sometimes be seen wading in the rice-fields, tending their crops.

Tea is the leaf of a shrub three or four feet high. The leaves are picked three or four times a year. They are heated in shallow pans, rolled with the hand upon a table, and then dried in sieves over charcoal fires. Much of the tea is shipped, in lead-lined boxes, to England and America. Quantities of an inferior kind are pressed into "bricks," and sent overland on the backs of camels into Siberia and Russia.

Chinamen eat very little beef or mutton, but every hut has its pig, and ducks, geese, and chickens. Fish cooked in lard or in castor oil is much used for food; but the chief food in China consists of rice and tea.

A great awakening of the people has taken place with the change in their customs. They



A Chinese wheelbarrow.

savage state, tending herds of horses, cattle, and camels. These people used to be robbers, and long ago one of the emperors of China built a great wall twelve hundred miles long to protect his people from them. Much of this wall is still standing. The high, cold plateau of Tibet has seldom been visited by white men.

Find Peking. It is the capital of the Chinese Republic. Where is Canton? It is one of the largest of the many large cities of China. Find Shanghai. It is the greatest seaport of China.

Hongkong, a small island near the coast, belongs to great Britain. A great many foreign merchants live there in order to trade with China.

When, a few years ago, Chinamen were first permitted to leave China, many came to the Pacific coasts as labourers. But our laws do not now permit Chinese labourers to enter the Dominion without paying a heavy poll tax.

What is the name of the peninsula northeast of China? It was once part of the Chinese Empire, but in 1910 it became part of the Japanese Empire and its name was changed to Korea. Like China, Korea has had very little to do with the outside world. What is the capital of Korea?

Sketch Asia, showing the Chinese Empire.

CHINESE EMPIRE.

- I. LOCATION AND SIZE. Countries.
- II. SURFACE. Plateaus and deserts. Great fertile plains.
- III. CLIMATE AND SOIL.
- IV. PRODUCTS. Rice. Tea.
- V. PEOPLE. Race. Distribution. Appearance. Food. Handiwork. History.
- VI. TRANSPORTATION.
- VII. CITIES.

Japan.

What island empire is east of China? In what zone are most of these islands? What is the name of the largest island? What is the name of the large island at the south end of the group? What sea lies between

Hondo and the mainland? What ocean is east of these islands? What do you know of the formation of these islands?

The Japanese have been called the "Frenchmen of Asia" because they are so polite; they



Volcano Fujiyama in Japan.

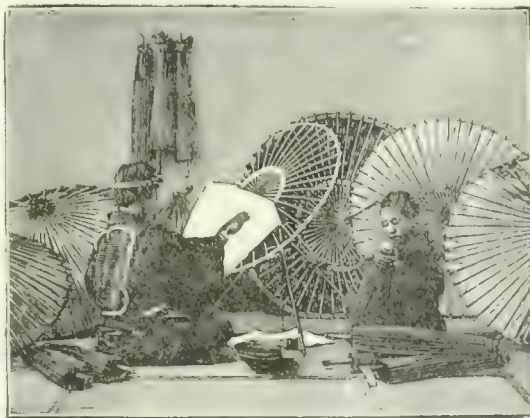
have also been called the "English of the East" because they are so energetic. The Japanese themselves call their country the "Land of the Rising Sun."

The Japanese islands are mountainous, and the scenery is very beautiful. The islands extend for 2,000 miles from North to South. How will this affect the climate of Japan?

There are many volcanoes and hot springs among the mountains, and earthquakes are frequent. The summers are warm and moist, but the winters are quite cold.

It is only in recent years that the Japanese have allowed vessels from all nations to visit their seaports. Since the foreigners were admitted Japan has made wonderful progress

in civilization. Railways and telegraph lines have been built; good roads have been made; daily newspapers are published; a university has been established; and every town and village has its schools.



Making parasols in Japan.

The Japanese look somewhat like the Chinese, to whom they are related. The men are short but sturdy; the women small and slight. The men are discarding the long, loose gowns with flowing sleeves, which were formerly worn, for the dress of Europeans and Americans.

The many earthquakes to which the islands are subject have caused the Japanese to build low wooden houses, which withstand the shaking. Among the poorer people, rice, fish, radishes, and tea are almost the only food.

The Japanese, like the Chinese, raise silkworms, and a great deal of tea. The camphor tree, and the tree from which is obtained the gum used in making lacquered ware, grow on the mountain slopes. The Japanese are very fond of flowers; they call their country the "Land of the Chrysanthemum," and have festivals in spring in honor of the cherry blossom. Their small farms have no fences, for there are few cattle and fewer horses. In the cities passengers are drawn by men, in little two-wheeled carriages called *jirikishas*.



A Japanese Carriage or Jinrikisha.



Selling Vegetables in Japan.

During the past fifty years the Japanese have made astonishing progress in all that goes to make a people great. Among the causes that have contributed to this development is the eagerness of the people to learn. Many young men go abroad to study in America and Europe and become acquainted with the arts and sciences of these continents.

Find the latitude of the northern and the southern extremities of the empire. In

what zones is it situated? The

country possesses a great variety of climates, thus rendering it possible to grow many different kinds of crops. The natural resources of the country in minerals, fish, and forests are very valuable.

Almost everything made in Europe and America is also manufactured in

Japan. Japanese silk, tea, porcelain, and lacquered ware are exported. The largest share of the exports of Japan is sent to the United States; but the imports come more largely from Great Britain.

Steamship lines connect Japan with San Francisco, Puget Sound, and the chief ports of Europe and Asia. Find Tokyo on the map. It is the capital, and is a city about five times as large as Montreal. It is a busy manufacturing centre. Yokohama, at the entrance of Tokyo Bay, is the chief seaport of Japan. Osaka, the second city of the empire, is noted for its cotton manufactures. Where is Osaka situated?

Sketch Asia; locate Japan.

JAPAN.

- I. LOCATION AND SURROUNDINGS.
- II. CLIMATE.
- III. PRODUCTIONS. Agricultural. Manufactured.
- IV. PEOPLE. Appearance. Food. Houses. Progress.
- V. CITIES.

India.

What three peninsulas project southward from Asia? What is the name of the middle peninsula? In what zones is India? What mountains are north of India? What waters are east? West? What Island is south? Describe the surface of India. The drainage.

India is the richest and most populous possession of the British Empire. The English first came to India about the beginning of the seventeenth century. Starting with a few trading posts, they have gradually extended their dominion over nearly two million square miles and three hundred millions of people. The Indian people are not fitted for free government like Canadians or Australians, but the country is wisely and justly ruled by British officials. Britain obtains no revenue from India, but her merchants control most of the trade, although the ports of the country are open to all nations alike.

For half the year southwest winds blow over India, bringing heavy rains from the Indian Ocean. During the other half of the year dry winds blow from the north. A wind which reverses its direction regularly in this way is called a *monsoon*, which means "season."

The great glaciers and snow-capped summits of the lofty Himalayas get their snow from the southwest monsoon. The lower slopes of the mountains are covered by forests; at their foot are dense thickets called



The Rhinoceros.



Country Scene in India.

jungles. The alluvial plains of northern India are the most fertile lands of the country,

and are covered with many villages, almost hidden by palm trees. In the jungles are many wild animals—the tiger, the leopard, the elephant, the rhinoceros, and the hyena. The

elephant is trained to carry heavy burdens and to drag timbers. The buffalo also is found, and the forests are filled with monkeys and birds.

The cobra, the most poisonous snake known, is found in India, where thousands of people die of its bite every year.

India is thickly inhabited by people of many different races and religions. The greater part are Hindus, who belong to the white race. They are divided into classes, called *castes*, which never mingle with

one another. The priests or Brahmans are the highest caste. They have very old books filled with poetry or stories of their gods. The lowest castes are miserably poor. They wear only a strip of cotton about the hips, with perhaps another tied around the shoulders; they sleep in mean huts on short rope beds, and live on rice and water, with an occasional piece of fish. The caste system, which prohibits a person born in one station in life from rising to any higher station, is the greatest drawback the Hindus have to face.

In India there are many magnificent palaces, temples, and tombs, some hollowed out of the



A Tomb in India.



rock as caves, and some built of marble and decorated with wonderful carvings or brilliant gems.

Most of the domestic animals with which we are familiar—the horse, ox, sheep, dog, cat, hog, and chicken—came originally from this part of

Asia, accompanying the white people to Europe, and from Europe to America. Many of our grains, fruits, and vegetables also came originally from this region.

Agriculture is the chief occupation in India. Only about five per cent. of the people live in large towns. The rest of the people are engaged in farming. In

the Ganges valley there are many irrigating canals, and in the Deccan plateau are large tanks to save the water which falls during the wet season. In the irrigated districts two crops a year are harvested, one in October and the other between January and March.

Rice, peas, and millet, a grain like clover seed, are the chief food of the people. Wheat, tea, and sugar-cane are also grown. The wheat is sent to Europe through the Suez Canal. The poppy is cultivated for the opium made from its juice.



Elephants Used for Carrying Passengers.

Much flax is grown for the seed, from which is pressed linseed oil. We use this kind of oil in mixing paints. Cotton, jute, and silk are also produced. Part of the cotton is sent to England, where it is made into cloth, much of which is sent

back to India. The jute is used in making coarse bags and rope.

The Hindus manufacture fine shawls, carpets, and rugs, and such delicate cotton cloth that they call it "woven wind." They also make fine gold embroidery thread, and beautiful jewelry. They have some modern factories, but most of their fac-

tory-made goods come from Europe.

The Ganges valley has many railroads, and narrow-gauge railroads lead to some of the "hill stations," as English towns in the mountains are called.

In 1911, Delhi, near the centre of Northern India, became the present capital. Calcutta, the former capital and the largest city, is the trade centre in the valley of the Ganges. What port is on the west coast? It has a good harbor, and is connected with Calcutta by a railway. Where is Madras? It also is a market and seaport. What city is in Ceylon? From this port tea and coco-nut oil are sent to England.

What fortress in the Spanish peninsula do the British own? They also control the Suez Canal. What town is on the Gulf of Aden near the mouth of the Red Sea? The British own this town. All these possessions make it possible for Britain to control the route of vessels from England to India.

Sketch Asia; locate India.

INDIA.

- I. POSITION, EXTENT, AND BOUNDARIES.
- II. SURFACE. Plains. Plateau.
- III. CLIMATE AND RAINFALL.
- IV. PRODUCTS. Vegetable. Animal.
- V. PEOPLE. Classes. Occupations. Government.
- VI. CITIES. Calcutta. Bombay. Madras.



Street Scene, India.

Southwestern Asia.

What five countries in southern Asia west of India? Which has no season? What sea is north of Persia? What gulf south? What empire owns the western part of the Arabian plateau? What three seas border Asiatic Turkey? What waters wash the shores of the Arabian peninsula? Describe the surface of southwestern Asia. Its drainage.

Southwestern Asia is a rugged plateau with little low land except the alluvial plain of the Tigris and Euphrates rivers. Much of it is a desert; for the southwest winds, which in India blow from the ocean, in this region blow over a hot land, and therefore bring little rain.

Figs and dates are raised for food and are exported in great quantities. Grass is really the most important food stuff, for it supports the herds of camels, goats, and sheep which form the chief wealth of the region.

There is no finer wool than that produced in these dry plateaus. The rugs and carpets made in this part of Asia have a market in every part of Europe and North America.

The camel is of great importance, for it can travel long distances over the dry and barren deserts without food or drink. It is often called "the ship of the desert." Trains of camels sometimes carry loads of merchandise a distance of several thousand miles.



The Arabian camel.



Arabians.



Weaving a Persian rug.

Excepting the ruling class in Turkey, who belong to the yellow race, the people of southwestern Asia belong to the white race. They are generally employed in herding, trading, and weaving by hand.

Afghanistan and Baluchistan are two small mountainous states, through which caravan routes lead into India. Baluchistan practically belongs to Britain.

The Persians are noted for the silks, carpets, and fine shawls which they weave by hand. Name the capital of Persia.

The Arabs of the plateau of Arabia are closely related to the Jews, whose history is contained in the Old Testament, and whose country lies between northern Arabia and the east coast of the Mediterranean Sea.

The Arabs are generally wandering herdsmen, each tribe being governed by a chief called a *sheik*. The most flourishing Arabian state is Oman, in the southeast.

Most of Arabia is a desert, with a few fertile tracts where the Arabian horses are raised. There are fertile lands near the coast, too, where dates and coffee are grown.

The Turks, who form the ruling class in Asia Minor, are followers of Mohammed. There are many Christians, however, of the



A street in Yafa, the seaport of Jerusalem.

white race, to whom the Turks are very cruel. They are the weavers, traders, and bankers.

Find Jerusalem. It is famous for many of the scenes in the life of Jesus. Find Smyrna. It is a noted seaport. Damascus is one of the oldest cities in the world. The cloth called *damask* is still made in this city. Where is Mecca? It is the birthplace of Mohammed.

Make a sketch map of Asia, showing the five southwestern countries.

SOUTHWESTERN ASIA.

- I. PHYSICAL. Surface. Coast. Climate.
- II. POLITICAL. Countries. Chief cities.
- III. INDUSTRIAL. Occupations. Products. Trade. Export.

Southeastern Asia.

Where is Indo-China? What bay is west? What sea is east? What gulf opens into this sea? What peninsula in the south? What island is southwest? What strait separates the peninsula from the island?

The climate, animals, and food stuffs of Indo-China are much like those of India. The islands near by, however, produce, among mineral products, tin; among animal products, ivory; and among vegetable products, ebony, hemp, camphor, and a great variety of spices.

Most of the people of Indo-China belong to

the yellow race, but in the southern part there are many Malays.

Burma, in the west, belongs to Great Britain, and is governed as part of British India. Name two Burmese cities.

Siam is an independent native kingdom. The country is sometimes called the "Land of the White Elephant," for white elephants are held so sacred there that they are treated as if they were kings. Most of the trade is in the hands of European and Chinese merchants. Teak, a hard wood used in shipbuilding, comes from the forests. Precious stones are found in Siam. What is the name of the capital?

Anam and Cambodia are French possessions. Much of the trade is with France. Rice, sugar, and raw silk are exported.

The Malay peninsula contains a British colony in the southern part, and several small native states. Spices and gutta-percha, a kind of rubber, are the chief products. About two thirds of the tin used in the world is brought to Singapore to be shipped to Europe.

The islands southeast of Asia are often called the East Indies. Where are the Philippines? They are controlled by the United States. They export sugar and Manila hemp, which is used in making ropes and cables for ships.

The islands southeast of the Malay peninsula (see map, p. 23) belong to the Netherlands, and are called the Dutch East Indies. Java is the most im-

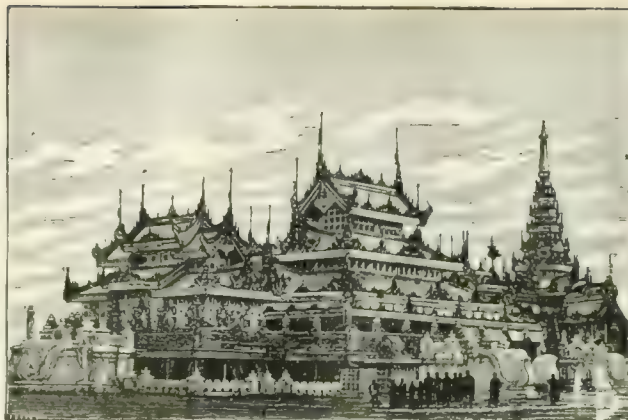


Burmese girl.

portant. Sugar, coffee, tobacco, spices, and tin are the chief products of these islands. The land is tilled by Chinese and native Malay laborers.

Batavia is the capital of the Dutch possessions, and is a great commercial city.

The islands of Banca



A Temple in Siam.

and Billiton, near Sumatra, are noted for their tin mines.

SOUTHEASTERN ASIA.

- I. PHYSICAL. Surface features. Coast. Climate. Neighboring islands.
- II. POLITICAL. European owners. Native government. Races.
- III. INDUSTRIAL. Productions. Important mineral export.

REVIEW EXERCISES.

Size.—Compare Asia with North America in size. With South America. With Europe. (See page 175.)

Plateau of Tibet.—How far north of the Tropic of Cancer is the plateau of Tibet? What part of the United States is about as far north? Compare the climate of British Columbia with that of Tibet. Account for the difference. Compare the climate in the plains of India with that of Tibet. Explain this difference. How does the plateau of Tibet compare with the plateau of Mexico in size and elevation? With the plateau of Bolivia? With Switzerland? Compare the Himalayas with the Rocky Mountains. With the Andes. With the Alps.

Desert Region of Asia.—Locate the desert belt of Asia and name the countries which it includes. Why are these regions deserts? What animal peculiar to desert regions is found in all these countries? In which of these countries are horses found? Sheep? The yak? Is this desert region thickly peopled? Why? Are the people civilized or uncivilized? What are their occupations in Tibet? In Chinese Turkestan? In Persia? In Arabia? In Turkey? Has this region any large cities? Where is Mecca, and for what is it noted? Smyrna? Jerusalem? Damascus? Where is the country of the Jews?

Great Siberian Plain.—Where is the great Siberian plain? What is its continuation in Europe called? In what countries are the Arctic regions of America? Name the large rivers of the world which flow into the Arctic Ocean. Are their basins productive? Why? Where are the frozen, marshy, mossy plains of these river basins? Where are their forests? What fur-bearing animals are found in these Arctic regions? What people in these regions in Asia? In America?

China and Japan.—What two great Mongolian empires in eastern Asia? How does the Chinese Empire compare with the Dominion in size? What two rivers drain the great plains of China? What are the chief articles of food in China? How are they cultivated? In what part of China is rice cultivated? In what parts is tea cultivated? By what two routes may it be shipped from China to Canada? How is tea sent overland from China to Europe? Is silk manufactured in Canada? What country in Europe leads in the making of silk? From whom did the Europeans learn to make silk? To whom do the Chinese sell silk? Which is more advanced, European civilization or that of China? What could China learn from Europe? When did Japan begin to advance rapidly in civilization.

India.—Where did the white people of Europe come from originally? Of America? When the white people migrated from Asia to Europe, what animals did they take with them? What plants? Where are the fertile regions of India? What are the leading crops raised? Which form the food of the people? What grain is shipped to Europe? By what route do steamships go from India to Liverpool? Where is Calcutta? Madras? Bombay? Delhi? What raw material is shipped from India to England? What have been the results of the rule of the British people?

Indo-China.—Where is Indo-China? Of what countries is it composed? In what respects is it like India? Compare the East Indies with the West Indies in location, climate, and productions. With what common metal is the world supplied mostly from the East Indies? Why were the West Indies so called?

AFRICA.



AFRICA. (Same scale as maps of North America, South America, Eurasia, and Australia.)

Position and Coast Line.

Compare this map of Africa with those of North America and of Eurasia. How does

Africa compare with those grand divisions in size? What sea is north of Africa? What ocean and gulf are west? What sea, gulf,

and ocean are east of Africa? By what isthmus is Africa joined to Asia?

What part of Africa is crossed by the equator? In what zones is Africa? It is the hottest of all the grand divisions. Why?

Which has the greater number of bays and peninsulas—Africa or Eurasia? Africa or North America?

For what was Columbus searching when he discovered America? At that time Portuguese sailors were hunting for an eastern route to India. Name the cape on the southern coast of Africa. When this cape was reached the King of Portugal named it Good Hope, because he believed that the route to India had been found. What other water route is there from Europe to India? Which is the shorter?

What large island is east of Africa? How is it separated from the mainland? Name three groups of islands west of Africa. The Canary Islands are the home of the canary birds. Cape Verde, after which the islands west of it are called, owes its name to the dense vegetation that covers it; for *Verde* means "green." All the islands off the west coast are volcanic.

Practice making a sketch map of Africa.

POSITION AND COAST LINE

- I. LOCATION. Waters surrounding. Circles crossing.
- II. SHAPE. Its length and its breadth. Its three coast lines. Its outline. Islands near.
- III. SIZE. Comparison: with Eurasia; with North America.



A gorge in the Atlas Mountains.

Relief and Drainage.

Trace on the map the divide between the Indian and the Atlantic slopes of Africa. On which side of the divide is the longer slope? What four great rivers drain the longer slope? To what ocean? What river on the shorter slope of Africa? To what ocean does it flow?

Africa is a great plateau, highest in the southern and eastern parts. There is a rim of mountain ranges around the border, and from these the surface slopes steeply down to a narrow fringe of low coast plains.

Where are the Atlas Mountains? Many years ago people believed that a giant named Atlas lived in northwestern Africa and held up the sky on his shoulders. These mountains are so high that the clouds sometimes seem to rest on their summits. In the southern part of Africa there are several short ranges. What is the name of the chief range? Where is the highland of Abyssinia? This is a lofty plateau with a climate much cooler than that of the surrounding parts of the grand division. The two mountain peaks south of this plateau are the highest in Africa.



Second cataract in the Nile.

In the central part of Africa, on each side of the equator, is a broad, fertile belt of land which has a very heavy rainfall. North of the equator this region is called the Sudan. What other continent has a large, well-watered region that is crossed by the equator? In what part of Africa are most of the lakes? What large river system lies within this moist equatorial region? How does it compare with the other rivers of Africa in the number of its branches? What large river in the western Sudan? Into what gulf does it flow?

North of the Sudan the climate is so dry that little vegetation grows over a wide region extending from the Atlantic Ocean to the Red Sea. What is this region called? Its surface is low and level in some places, and rugged and rocky in others. In what direction do the mountains which cross it extend? What large river crosses the Sahara to the Mediterranean Sea? Next to the Mississippi-Missouri, the Nile is the longest river in the world. Where does it rise? In the lower part of its course it has no branch. Why?

Much of southern Africa is also very dry, but it has two large rivers. Where does the Orange River rise? Into what does it flow? What river flows eastward into the Indian Ocean?

Nearly all the large rivers of Africa have

rapids or falls where they flow from the plateau to the low coast plains. Steamboats can ascend the Nile to the first cataract, — about eight hundred miles, — but in the Kongo the rapids begin a little over a hundred miles from the sea.

Which grand division has more large lakes than Africa? Name the largest lake of Africa. It is nearly as large as Lake Superior. What great river flows from this lake? Name the lake southwest of Lake Victoria. What great river is its outlet? What lake to the southward empties into the Zambezi? What large lake in the north-central part of Africa?

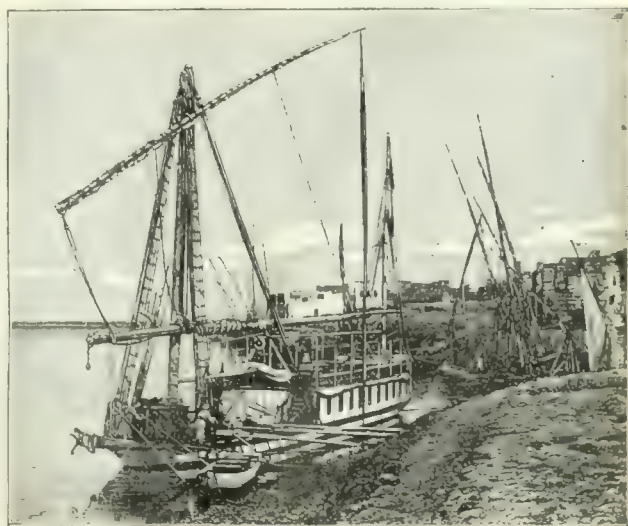
Practice a sketch map of Africa. Show its chief mountains and rivers.

RELIEF AND DRAINAGE OF AFRICA.

- I. SURFACE. General elevation. Mountain border. Coast plains.
- II. REGIONS. The Sahara. The Sudan.
- III. RIVERS. The Nile. The Kongo. The Niger. The Zambezi.
- IV. LAKES. Equatorial. Lake Tchad.

People.

Africa has almost twice as many people as North America, and perhaps two thirds of them belong to the black race. The real home of the negro is the region south of the Sahara.



Scene on the Nile.

The black men in America have become civilized by living with the white people, but in Africa most of the negroes are not civilized and are frequently at war. Many of the tribes, however, raise corn and other grain to feed to their herds of cattle, and some of them have learned to make cloth and leather.

Most of the negro tribes live in villages, some of which contain hundreds of low huts. The negroes are fond of dancing and of music which is often harsh and disagreeable to white people. Some tribes are so fond of ornaments, that it is common to see a negro with his nostrils or lips pierced and ornaments fastened in the holes. Many of them grease and paint their bodies, and wear little or no clothing.

The northern coast of Africa is more like the neighboring countries of Europe than like central Africa, from which it is separated by the desert called the Sahara. Its people are mainly Berbers and Arabs; they belong to the white race, but, like the Turks, they believe in the Mohammedan religion. Some of the Berbers are civilized, but many are in a half-savage state. They wander about the country with their herds of cattle and camels, sometimes plundering caravans.

The Berbers once occupied all the country from the Red Sea to the Atlantic Ocean, but about a thousand years ago Arabs came



An Arab sheik.

over from southwestern Asia, and their descendants are to-day the traders of northern Africa. The Arabs wear flowing robes and turbans, and are among the finest horsemen in the world. Nearly all the trade between the interior and the coast is by means of Arab caravans.

In southern Africa and along the coast are European colonies.

Sketch Africa, showing where the negroes, Berbers and Arabs, and European colonists live.

PEOPLE OF AFRICA.

- I. INHABITANTS. Number. Races.
- II. NEGROES. Home. Appearance. Civilization.
- III. BERBERS AND ARABS.
- IV. EUROPEAN COLONISTS.

Industries.

The industries of the northern coast of Africa, like the people, are similar to those across the Mediterranean Sea. But central Africa is so hot, a part of it is so dry, and its interior is so difficult to reach, that it has only recently been explored by Europeans, and its exports are very different from those of the other grand divisions.

The people from the Mediterranean coast could not easily cross the Great Desert to the south. It is only by means of camels that the Sahara can be traversed. And these animals are constantly crossing the Sahara to the Sudan, carrying salt, cloth, knives, and trinkets. These are traded to the natives of the interior for ivory but also for gold



A Sudan slave.



An Arab woman and child.



dust and ostrich feathers, which are brought back to the markets near the coast. How are camels fitted to cross deserts?

Ivory is the most valuable product of Africa, and great quantities of it are exported every year. From what is it obtained? Elephants are found all over the great central region of Africa, but are being killed so rapidly that in a few years probably none will be left. What part of the elephant furnishes ivory? In what other grand division are elephants found? For what is ivory used?

Up to the beginning of the present century slavery existed in many parts of Africa, in some parts of Asia, and even in European Turkey. In the rest of Europe and in America it is no longer permitted, and it has been abolished in Zanzibar, and in the British, German, and Portuguese dominions, and slave raiding in any part of Africa is now a thing of the past.

Few animals live in the Sahara, but one of the most useful is the ostrich, a huge bird that stands about seven feet high. The ostrich



Ostrich.

does not fly, but it is so swift a runner that a horse can hardly overtake it. Its feathers are used as ornaments. There are many ostrich farms in southern Africa. Great care is given to the raising of young birds, and the plumes are carefully cut each



Caravan on the Sahara.

season. These ostrich farms afford most of the world's supply.

Gold is found in many parts of Africa, and has had much to do with its settlement. Until gold was found in California most of the coin of Europe was made of gold from the west coast of Africa. There are now rich gold and diamond mines in southern Africa.

Sketch a map of Africa, showing where ivory, gold and the ostrich are found.

PRODUCTS OF AFRICA.

- I. IVORY. What it is. How obtained. How carried. Use.
- II. SLAVES. Where captured. Where sold.
- III. GOLD AND DIAMONDS. Where found.
- IV. OSTRICHES. The wild ostrich. Ostrich farms.

Barbary States.

Name the countries along the Mediterranean Sea west of Egypt. They have about the same warmth and rainfall as southern California. They are called the Barbary States, because most of the inhabitants at one time were Berbers.

Which state is opposite Spain? It was named from its people, the Moors, a tribe of the white race closely related to the Jews and Arabs. The people of Morocco are miserable poor and are brutally treated by their emperor or sultan. The capital of the country is an city in which the sultan may happen to live sometimes it is Fez, the largest city, and

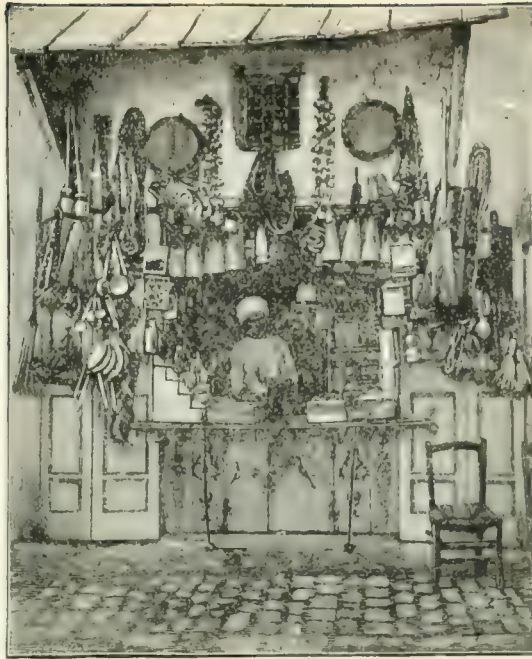
sometimes Morocco. In these cities the white, flat-roofed houses have no outside windows, but each is built around an open courtyard in the middle. In the sunny streets are seen Arab and Berber soldiers on their fine horses, women with their faces concealed in the folds of their white robes, and donkeys and camels carrying heavy loads and driven by ill-clad Arab and negro boys. Morocco is famous for its beautiful leather.

What state is east of Morocco? It is part of the French Republic. Caravans bring goods to the markets along the railways of Algeria. Find Algiers. It is the largest city and seaport.

On how many sides has Tunis a seacoast? Tunis was once a Turkish possession, but it now belongs to France. What is the capital?

Tripoli, an Italian possession between Tunis and Egypt, extends for 1,000 miles along the northern coast and about 800 miles into the interior. Most of the land is a desert.

Europeans now control most of the trade and own most of the fertile lands of the Barbary States. A great deal of wheat, barley, and millet is grown here for European



Grocery store in Tunis.

markets. Tobacco of fine quality is produced. Olives, dates, and esparto, a kind of grass of which paper is made, are produced and exported.

Sketch a map of Africa; show the Barbary States, and locate the cities of Morocco, Algiers, and Tunis.

BARBARY STATES.

- I. NAMES AND LOCATIONS.
- II. CLIMATE AND PRODUCTIONS.
- III. CITIES.
- IV. PEOPLE. Natives. Europeans.

The Sahara.

The name *Sahara* means "desert." The region itself is a part of the great barren tract that stretches across Africa and most of Asia. Trace this belt on the map of Asia and name the different deserts included in it. These are deserts not so much because the soil is sterile, or sandy, as because so little rain falls that few kinds of plants can grow. In some parts it is so dry that no plants of any kind can live.

Toward the south of the Sahara, where the climate is moister, more or less grass grows, and still farther south the desert region gives place to the fertile lands of the Sudan. In the desert itself there are occasional springs or wells surrounded by grass and date palms. These fertile spots, or *oases*, are the only parts of the Sahara (except the valley of the Nile) where people can live.

This desert is probably the hottest part of the earth, though the nights are cool, and sometimes cold enough to freeze water.

Describe the surface of the Sahara. In some parts it is covered with loose rocks and in



Street scene in Morocco.

others there are sand dunes that drift about with the wind. Sometimes fierce winds blow and the air is so full of fine sand that it is almost as dark as night. Then the camels and their drivers lie upon the ground with their heads almost buried in the sand until the storm has passed.



Oasis in Tripoli.

Sketch Africa ; locate the Sahara, and show its mountain range.

THE SAHARA.

- I. LOCATION. In Africa. In the desert belt.
- II. SURFACE.
- III. WINDS AND SAND STORMS.
- IV. VEGETATION.
- V. CARAVANS.

Egypt and Abyssinia.

What sea is north of Egypt? East? What river flows through the country? How was the Nile delta made? What kind of soil has it? What other rivers do you know of that have deltas?

The country of Egypt is several hundred miles broad, but the only part in which people can live is the flood plain of the Nile, rarely over four or five miles wide. On each side of it is a hot desert.

Except in the delta scarcely a drop of rain ever falls on this flood plain of the Nile. It is well watered, however; for once a year the rains in the southern highlands flood the Nile, which overflows the plain on each side of it. Little by little the water subsides and leaves a coating of mud over the land, which yields wonderful harvests of cotton, sugar, rice, and wheat. Perhaps no other country produces such fine dates, melons, and figs. These fertile lowlands of the Nile are very densely populated.

The Egyptians are a mixed race. Most of

them are of mixed Arab and negro blood, and are Mohammedans. The Arabic language prevails.



Street scene in Old Cairo.

Egypt is called a Turkish possession, for the *khedive* or ruler pays tribute to Turkey. But since 1880, the real rulers of Egypt have been the British, who have established peace, order, and just government.

The Egyptians were civilized long before even the Greeks. They built in the Nile valley many vast temples, monuments, and tombs, the huge ruins of which still stand. One of these old monuments or *obelisks*, which stood in Egypt in the time of Moses, has been brought to New York city and placed in Central Park.

Find Cairo. It is the capital of Egypt. Near it are the pyramids. (See picture, p. 15.) They were built many thousand years ago as tombs for the kings. Find Alexandria, the chief seaport. Where are Suez and Port Said?

Where is the Nubian Desert? Nubia and much of the country south of it are claimed by Egypt. In this part of the Nile are found the crocodile and the hippopotamus, which is somewhat like a hog, but much larger.

Many of the people of Abyssinia are Christians. They are thrifty farmers and herders. There are also many Arab slave traders in the country. It is thought that coffee came first from the Abyssinian plateau.

Sketch Africa; show Egypt, the Nile, and the lakes near its source.

EGYPT.

- I. LOCATION.
- II. THE NILE BASIN. Shape and position. The river: length; delta; source of water; floods. Soil and productions.
- III. PEOPLE. Government. Ancient civilization.

The Sudan and the Belgian Kongo State.

South of the Sahara, stretching across the continent from Cape Verde to the Abyssinian highland, is a broad belt of fertile land called the Sudan. It is a part of the well-watered region of equatorial Africa, and is composed partly of open lands and partly of forests.

There is no boundary between the Sahara and the Sudan, but the desert gradually disappears as the rainfall increases. In the Sudan are found the giraffe, the elephant, and also the lion, which is common to most parts of Africa. Name the rivers in the Sudan; the lake. How does the Sudan compare with the Sahara in size?

The name *Sudan* means "black." It is in this part of Africa that the most civilized negro tribes live. They cultivate cotton and grain, own herds of cattle, and manufacture cotton cloth and leather goods. Each great tribe has

its king. Most of the people of the Sudan are Mohammedans.

There are a few large native towns in the Sudan, with bazaars or markets, where the Arab merchants gather the products of the Sudan to carry them to the seaports.

What state occupies most of the Kongo basin? This region is covered with dense forests, and is the home of many millions of people.

What large animal found in much of this region is hunted and killed? Ivory and rubber are valuable exports. In what respects

is the Kongo basin like the rubber-producing region of South America? The rubber trees of the two regions are not of the same kind.

Though the Kongo basin has a climate unsuited to Europeans, there are traders in this region from Belgium, Britain, Germany, France and Holland.



Hippopotamus.



Giraffe.



Making baskets in central Africa.



SOUTH AFRICA

SCALE OF MILES.
0 25 50 100 150 200

Railways (Dashed line)
Coast (Solid line)

Steamers sail on the rivers, but much merchandise is carried by the natives over the narrow trails which everywhere cover the interior of Africa. The Kongo State is controlled by the King of the Belgians. Its trade is chiefly with Belgium and the Netherlands.

What is the capital of the Kongo State?



Carrying Hides to the Coast, Madagascar.

Sketch Africa; locate the Sudan, the Kongo River, the Kongo State, and Boma.

THE SUDAN AND THE KONGO STATE.

- I. LOCATION.
- II. THE KONGO RIVER.
- III. CLIMATE AND RAINFALL.
- IV. FORESTS AND ANIMALS.
- V. PEOPLE. Natives. Europeans.
- VI. TRADE.

Coast Countries.

Various European nations have established colonies among the negro tribes of the west coast of Africa. Where are Sierra Leone and Liberia? One was established by Great Britain, and the other by the United States, for freed slaves. Liberia is now an independent republic.

The west coast of Africa is rich in gold, and yields harvests of coffee, cotton, and sugar-cane. One of the chief products of the coast region is an oil pressed from the nut of a palm tree. Palm oil is used in Europe and in America for making soap. The forests yield kola nuts, india rubber, and copal, from which the best varnish is made. All these products are sold in Europe and America.

The east coast also is divided among European countries. The chief products are ivory, rubber, and sesame seeds, from which a valuable

oil is pressed. The Arabs are still secretly engaged in the slave trade. Zanzibar, controlled by Great Britain, is one of the most important places on the east coast.

The island of Madagascar is now a French colony. The former ruling class belongs to the Malay race, and is partly civilized. Slavery was abolished by the French government in 1896. Gold and copper are mined, but farming and cattle-raising are the chief employments. Rice, sugar-cane, coffee, and cotton are cultivated. Rubber and hides are the chief exports. The greater part of the trade is with France. Antananarivo is the capital. What is the chief seaport?

Cape of Good Hope.

The region from the Cape of Good Hope to the Orange River is known as Cape Colony. What is its capital? The first owners of Cape Town were the Dutch, who settled there not long after New York was founded. But just as the English took New York, so they afterwards captured Cape Colony, which is now the most prosperous country in Africa.

The Dutch and the English did not live very peaceably together; so the Dutch settlers, or Boers, when slavery was abolished by the British, sold their lands, and, moving north across the Orange and the Vaal rivers, formed the Orange Free State and the Transvaal. Soon gold was discovered in the Transvaal, and the richness of the mines attracted a large body of immigrants, mostly British, and the city of Johannesburg



Natives Tanning Hides, Natal.

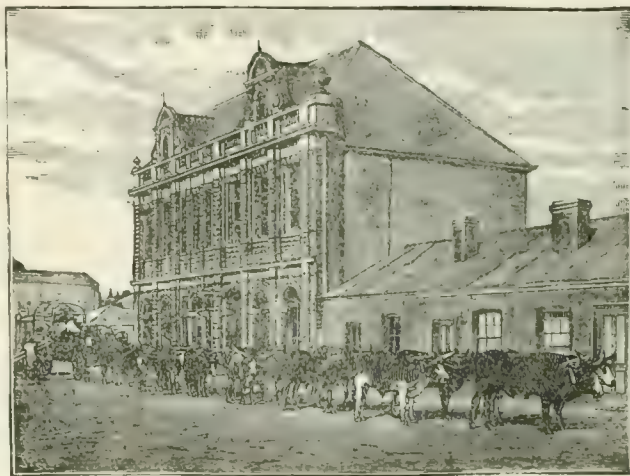
became the centre of the gold-mining districts. Although the miners paid heavy taxes, they were not permitted by the Boers to have any part in the government of the country. The result was that these British settlers became dissatisfied, and in the end war followed between Great Britain and the two Boer Republics of the Orange Free State and the Transvaal. The Boers were conquered and their country annexed to Britain. In 1909 the four colonies of Cape of Good Hope, Natal, Orange Free State, and Transvaal, formed the Union of South Africa on a similar plan to our own Confederation. The Legislature is to meet at Cape Town, but for all other purposes Pretoria is to be the capital. Both English and Dutch are to be official languages.

Farming is carried on along the eastern and southern coasts where a sufficient quantity of rain falls to make it profitable. Grain, fruits, tea, sugar, and tobacco are the chief products. In the southeast ostrich farming is extensively carried on for the sake of the feathers. But through the Union, sheep and cattle raising is the chief

industry. Gold and diamond mining are the main sources of wealth. The centre of the gold-mining industry is Johannesburg, and of the diamond industry, Kimberley. This city exports more than nine-tenths of the diamonds produced in the world.

Owing to the regular east line, there are few good harbors in South Africa. Name the chief towns along the coast. The trade of the Union is chiefly with Great Britain, and the most important exports are gold, diamonds, wool, and ostrich feathers.

Where is Kimberley? More diamonds come from the mines near Kimberley than from all the rest of the world. The rich gold mines in these states are worked mainly by the British and Americans.



Scene in Johannesburg.

Railways have been built through much of this region to the seaports. Cape Town is the principal seaport of southern Africa.

Sketch Africa; locate Cape Colony and adjacent British colonies. Locate Cape Town, Kimberley, Johannesburg, Pretoria, and Bloemfontein.

SOUTH AFRICA.

I. COUNTRIES.

II. HISTORY.

III. MINES.

REVIEW EXERCISES.

Location.—Where does the equator cross Africa? What other grand division does it cross?

Surface.—Which grand division is a great plateau? Which is higher, its northern or its southern part? Its eastern or its western part? What cape near its southern extremity? What plateau between the Cape of Good Hope and the Red Sea? What mountains? Does the highland region which extends from the Cape of Good Hope to the Red Sea include the highest part of Africa?

Rivers.—Name the three largest rivers in Africa. Into the waters of what ocean do they flow? Beginning at the south, draw a line separating the part of Africa drained into the Indian Ocean from the part drained into the Atlantic Ocean and its seas. What rivers of Africa rise in the equatorial regions?

Forests.—Where is the forest region of Africa? What other grand division has a vast equatorial forest region? Mention one way in which equatorial forests differ from those of temperate zones. Name some animals of the African forests. Of the South American forests.

People.—To what race do most of the people of Africa belong? What part of Africa is the home of the black race? In what other grand divisions are many negroes found? What part of Africa was the seat of an early civilization?

To what race do the inhabitants of northern Africa belong? What natural barrier separates northern Africa from the land of the black man? Name the chief possessions of Britain, France, and of Germany in Africa.

Ivory and Ostrich Feathers.—What animals of Africa yield valuable products? Where is the ostrich found in its wild state? What are ostrich farms? Where is Cape Colony? In what parts of Africa is the elephant found? Where is the Kongo State? How is ivory obtained? Why is the supply of ivory decreasing? How is it carried to the markets? What is a caravan? Where does Asiatic ivory come from?

Gold and Diamonds.—In what countries of Africa is gold found? What are the coast countries? Where are the Boer States? Name them. Who are the Boers? Where is Johannesburg? Where are the Kimberley diamond mines? To what nation does Cape Colony belong? What is the chief seaport? Diamonds are sent to Amsterdam to be cut.

Egypt.—Where is Egypt? What river drains it? How can the Nile valley support so dense a population? What are the leading products of the Nile basin? Where is Cairo? Alexandria? What attracts travellers to Egypt? What nation rules Egypt?

AUSTRALIA AND THE ISLANDS OF THE PACIFIC.

Australia.

In what direction from Asia is Australia? (See map, p. 23.) Is it an island or a continent? It is also spoken of as a grand division. What tropic crosses it? What other grand divisions are crossed by the same tropic? In what months is Australia? Which are the winter months in southern Australia? Name the waters which surround Australia. Name the large islands near it. In what part of Australia are the highlands? In what part are the longest rivers? Practise drawing an outline map of Australia.



AUSTRALIA. Same scale as maps of North America, South America, Eurasia, and Africa.

Captain Cook explored Australia and took possession of it for Britain about the time that the United States gained their independence. The first settlers were convicts, and soldiers to guard them. - Afterwards rich gold fields and sheep pastures attracted many immigrants, and five colonies were founded. In 1901, these colonies,

together with the neighbouring island of Tasmania, were united into the Commonwealth of Australia, with a government much like that of the Dominion of Canada. There is a governor-general appointed by the British sovereign, and a parliament chosen by the people. Each of the colonies, now called states, has also a legislature to look after local affairs, as in Canada.

In the southern part of New South Wales, 900 square miles of territory have been set apart for the federal capital at Canberra. Until the federal buildings are completed, Melbourne is to remain the capital.

The surface of most of Australia is a low, dry plateau, with a range of mountains along the east coast. In the southeast the mountains are separated from the interior plateau by broad lowlands. Most of the rivers are sudden torrents which soon dry up, or sink into the sandy soil. The lakes are salt marshes or shallow pools.

Over the dry interior region, strange shrubs and spiny grasses form a thicket so tangled



Australian Forest.



Kangaroo.

There are forests of eucalyptus, one of the tallest trees in the world, with long, pointed, dark-green leaves turned edgewise to the sun.

The animals are even stranger than the plants. Many of the native birds are like those of Asia, but most of the four-footed animals are *pouched*. There is a sac on the breast of the mother, in which the young are carried for some time after birth. The largest of these pouched animals is the kangaroo, which has very powerful hind legs on which it travels swiftly by jumping, without touching its weak fore legs to the ground. Much kangaroo leather is sold in America.

The natives are black savages, very degraded and ignorant. Few of them now remain.

The gold mines are among the richest in the world, and silver, tin and copper are obtained in considerable quantities. But the chief occupation of Australia is the production of wool.

and bristling that only a few wild animals can crawl through it. Even on the mountain slopes and in the coast regions, where there is greater rainfall, the plants are not like those in the rest of the world.

Over one-fourth of the world's wool product is grown in Australia, and great quantities are exported, chiefly to England. Tallow, hides, leather, preserved and fresh meats are also exported, as well as wheat, flour, gold, and tin. In exchange for these, manufactured articles are sent from the mother country. What city is the chief wool market of the United States? (Page 82.)

What is the name of the most southern colony? It is one of the richest gold-producing regions in the world. What is its capital?

What colony is north of Victoria? New South Wales is the richest and most populous colony of Australia. Its capital is a port for steamships from San Francisco and Vancouver.

What colony is north of New South Wales? Tin is mined in Queensland. Name the capital.

In South Australia only a few square miles along the coast are productive, but this colony yields considerable wheat.

What is the capital and chief seaport of South Australia? Of Western Australia?

Railways have been built from the larger cities of Australia to the ranches and mines



Native Australians.



Australian sheep.



in the interior, and the Australian colonists are among the foremost people of the world in their modes of government and education.

Though Australia is nearly as large as the United States, it contains but half as many inhabitants as the state of New York.

84. Islands of the Pacific.

What group of islands is south-east of Australia? What island is south? What large island is north? What is the name of the sea

east of Queensland? What coral formation lies in this sea? (See p. 89.)

The large islands near Australia are rugged plateaus with high mountain ranges. Some of the small islands shown on the map are the tops of volcanoes which are partly covered by the sea; others are low coral islands.

New Zealand is a volcanic region, containing geysers like those of Yellowstone National Park. The two large islands are about four times as large as New Brunswick. Sheep raising is



Native huts, New Zealand.

the chief industry, and wool and meat are exported. New Zealand is a British colony, and most of the people are of English descent. The natives, called Maoris, belong to the Malay race. What is the capital? Where is Auckland? Steamships from Vancouver and San Francisco call at this port. Lines of railway have been built through the islands. Tasmania is a plateau with very fertile valleys. It is a British colony, and for a long time convicts were sent there as well as to Australia. The chief exports are wool and tin. What is the capital?

The Fiji Islands, north of New Zealand, also form a British colony. The natives are Malays, and have been so far civilized that they now work on the plantations, from which



Going for water, New Guinea.



New Guinea canoe, with sail made of bark.

sugar, fruit, and cocoanuts are sent to New Zealand and Australia.

New Guinea is owned by the Dutch, the British, and the Germans; but very few white people live there, and the natives are mostly savage.

The Hawaiian Islands are a group of small islands in the Pacific Ocean, near the Tropic of Cancer, and about two thirds of the distance from Sydney to San Francisco. They were annexed by the United States in 1898. While Americans own the greater

part of the land, most of the inhabitants are Japanese, Chinese, Portuguese, and natives. Most of the sugar used on the Pacific coast of our country is made from cane grown in the Hawaiian Islands. Honolulu is the capital and largest city.



Scene in Honolulu, Hawaiian Islands.

AUSTRALIA AND ISLANDS OF THE PACIFIC.

- I. HISTORY OF AUSTRALIA. Founding. Settlement. Government. Colonies. Cities. Trade relations.
- II. DESCRIPTION OF AUSTRALIA. Surroundings. Surface. Vegetation: native; cultivated. Animals. People.
- III. ISLANDS OF THE PACIFIC. New Zealand. Tasmania. Fiji Islands. New Guinea. Hawaiian Islands.

Latitude and Longitude.

Take a large apple, or make a sphere out of clay to represent the earth. Scratch a line for the equator, and mark the north and the south poles.

In passing from the equator to the north pole, what part of the distance round the earth do you travel? For convenience in telling how far any place is from the equator, the distance from the equator to either pole is divided into ninety parts, called *degrees of latitude*. How many degrees is it, then, from the north pole to the south pole? What point would you reach if you were to travel 90° (ninety degrees) north from the equator? Montreal is 45° north of the equator. How many degrees is it south of the north pole? The Isthmus of Suez is one third of the way from the equator to the north pole. How many degrees north is it?

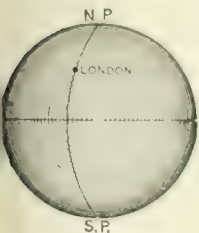
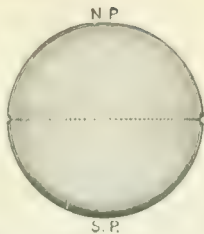
The mouth of the Mississippi is 30° north latitude. Put a dot on your sphere to show where the mouth of the Mississippi is.

London is 51° north latitude; scratch a spot on your sphere to represent it.

Scratch a line from the north pole to the south pole through this dot. A north and south line from the north pole to the south pole on a globe or map is called a *meridian*.

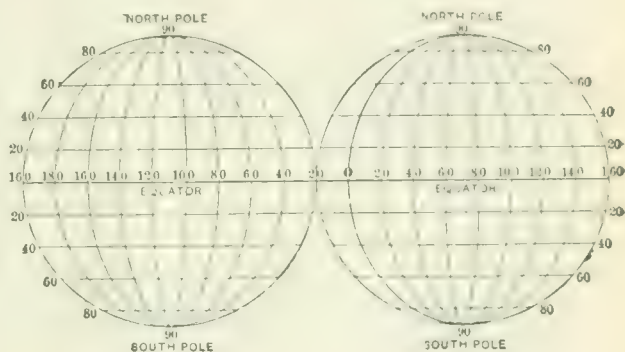
In a part of London called Greenwich there is a fine *observatory*, where astronomers observe the stars. The meridian passing through the Greenwich observatory is called the *prime meridian*, from which distances east and west are measured.

How many degrees are there between the equator and the north pole? How far around the world is that? How many degrees, then, would you pass if you traveled all the way



around the world to your starting point? The distance east or west from the prime meridian is also measured in degrees, called degrees of *longitude*. If you traveled east or west from the prime meridian all the way around the world to the prime meridian again, you would have passed 360° of longitude.

How many degrees would you pass in going halfway around the world? Suppose John starts from the meridian of Greenwich and travels west, and Charles travels east from the same point and just as fast as John goes west, how many degrees of west longitude will John have passed over when the two boys meet? How many degrees of east longitude will Charles have passed over? The line on this map marked 180° is how far around the world from the meridian of Greenwich?



The mouth of the Mississippi is 30° north latitude, and 90° west longitude. Now scratch a place on your sphere about where it is.

In order to tell how far north or south a place is, small circles, parallel to the equator, and hence called *parallels*, are drawn on maps. The parallels shown on the maps above are 20° apart. In order to tell how far east or west from the meridian of Greenwich any place is, meridians are usually drawn on maps. The meridians on these maps are 20° apart.

Cape Horn is 56° south. It is also 67° west. Put a dot where it belongs. Singapore is 2° north and 104° east. Put a dot where it belongs.

How does the land surface of the globe compare in extent with the water surface? About which pole is the larger ocean? Which oceans extend from one polar region to the other? Compare the Atlantic and Pacific oceans in number of tributary rivers, and in steepness and irregularity of coasts. Compare them in civilizations on their coasts, and in number of seaports.

Compare the northern and southern hemispheres as to land and water. Name the grand divisions in the order of their size.

Locations.—What grand divisions lie wholly in the northern hemisphere? What grand divisions are crossed by the equator? By the Tropic of Cancer? By the Tropic of Capricorn? By the polar circles?

Outlines.—Which grand division has the most regular outline? The most irregular outline? Name the peninsulas of Eurasia. Of North America. What is the largest bay nearly inclosed by a continent? How is it connected with the oceans?

Highlands.—What highland is between the Cape of Good Hope and the Red Sea? What plateaus between the Red Sea and Bering Strait? What mountains? What part of the highland of Eurasia is included in the line of highlands which extends from the Red Sea to Bering Strait? What line of highlands extends from Bering Strait to Cape Horn? What plateaus does it include? What mountains? Beginning at Cape Horn, name in order the plateaus and mountain ranges of the great highland regions which extend from this cape to the Cape of Good Hope. Beginning with South America, name the mountains of the world which are not included in the preceding list.

Rivers.—Into what ocean does the long slope of Africa drain? Of Eurasia? Of North America? Of South America? Beginning at Cape Horn, name in order all the large rivers of the world which empty into the Atlantic or Arctic Ocean. Name in the same order the great plains drained by these rivers.

Beginning at Cape Horn, name in order the large rivers of the world which empty into the Pacific or Indian Ocean. How does the Pacific and Indian Ocean slope compare in length with the Atlantic and Arctic Ocean slope in each grand division? Which slope has more large rivers? More alluvial plains?

Plains.—Where are the grassy plains of Eurasia? Where are the grassy plains of America? Of Africa? What are they called in North America? In South America? In Eurasia? What animals are found in the Sudan? What animals are found on the llanos? On the pampas? In Australia?

People.—Make a list of cities found in the highland regions of the world. In the lowland regions. Which list is the longer? Why? Which grand division has the most people? Which one is second in population? Which is last? Which race went to Australia from Europe? What races live in Africa? Which were there? From what grand division? What races live in Eurasia? In what parts does each mostly live? What races live in America? Which came here? From what grand division? What race has spread over the whole world as conquerors? What race was spread over the Western Continent to serve as slaves?

Rainfall.—In what zone does most rain fall? In what part of the zone is the rainfall heaviest? What large rivers of the world have most of their basins in equatorial regions? Where are the rainless regions of Africa? Of Eurasia? Of America?

Natural Products.—Make on the board a list of the chief food plants which you have learned about. Put after each the names of the regions where it grows. Find out whether these regions are alike in climate. In surface. Tell how each of these regions can find a way to export its products. Make a list of the regions of the world where animals graze. Find out whether these regions are alike in climate. In surface. Tell how they export their products. Make a list of the chief minerals which you have learned about. Put opposite each the grand division where it is found.

Manufactures.—What have you learned are the two great manufacturing grand divisions? What minerals are found in those grand divisions? Which grand divisions carry on the most trade? Why?

Latitude and Longitude.—Through what European countries does the meridian of Greenwich pass? Through what countries of Africa? Through what northern sea does the 180th meridian pass? Near what southern islands? What meridian passes through eastern Nova Scotia? Through what countries of South America does it pass? What country of South America is directly south of the Isthmus of Panama? What states of North America are north of the Isthmus of Panama?

Are the Japan Islands or the British Isles farther north? What country of North America is in the same latitude as the British Isles? Compare the climate of the two countries. What countries of Europe are in about the same latitude as Toronto? Compare their climate with that of Ontario. Which is colder—Cape Horn or Cape of Good Hope? Why? Compare the West Indies with the Sahara in latitude; in climate. Explain the difference.

THE BRITISH EMPIRE



Houses of Parliament, London

The British Empire consists of the United Kingdom of Great Britain and Ireland, the Empire of India, and a number of Dominions, Colonies, Protectorates, and Dependencies in different parts of the world.

Extent and Population. This is the largest empire on the globe. Its area is over eleven millions of square miles, and its population more than 400 millions. It comprises one fifth of the land on the earth, and more than one fourth of the people. A considerable part of this immense territory is unexplored and much of its resources are yet undeveloped. It

is an empire that stretches over all latitudes and longitudes, and upon which the sun never sets. It has every kind of climate, from equatorial heat to polar cold, and is inhabited by peoples of almost every race, religion, and colour. Wherever British control has been exercised, the benefits of civilization have been experienced.

Commerce and Trade Routes. The British Empire trades with all countries; a large part of the commerce is carried on within the empire itself. More than twelve million tons of shipping sail under the British flag. The

ocean serves as a great highway connecting the different scattered parts of the empire together. Swift ocean steamships ply between its different divisions, and carry the surplus products of one to another. Submarine cables connect the outlying parts with one another and with the British Isles. It is now possible to send a message round the world by cables touching only on British soil.

The trade within the empire itself naturally follows certain routes, of which the following are the chief:

(1) From the British Isles across the Atlantic to Canada.

(2) From the British Isles across the Atlantic Ocean to Canada, across Canada and the Pacific Ocean to Hong Kong, Singapore and India, or Australia and New Zealand. This is the most rapid route between the United Kingdom and the East.

(3) From the British Isles to the East by way of Gibraltar, the Mediterranean, Suez Canal, Red Sea, and Indian Ocean to India or Australia.

(4) From the British Isles to the East by way of the Atlantic, round the Cape of Good Hope, and thence to India or Australia.

(5) From the British Isles across the Atlantic, round Cape Horn, and through the Pacific to New Zealand, Australia or Hong Kong.

(6) From the British Isles to the West Indies, Honduras, and Guiana. The canal across the Isthmus of Panama will make a new route to New Zealand and Australia.

(7) From Canada to the West Indies.

To protect the empire and its commerce, Britain maintains a great navy and has established coaling stations and constructed dry-docks for the repairing of ships at various strategic points throughout the world. In this way, every steam-vessel is within a few days' sail of a supply of coal and of a place where repairs can be made. Much of the coal is shipped from the Mother Country, but vast supplies are also found in Nova Scotia, British Columbia, India, South Africa, New Zealand, and Australia. Dry-docks have been constructed at Gibraltar, Malta, Bombay, Calcutta, Hong Kong, Sydney, Auckland, Bermuda, Halifax, and Esquimaux.

Government. There are three classes of colonies:

(a) Colonies wherein both the legislative and executive powers are vested in officers appointed by the Home Government, i. e., the Government of the United Kingdom. These are known as *Crown Colonies*. Gibraltar, St. Helena, Ceylon, Trinidad, Sierra Leone, and India are examples.

(b) Colonies which have *representative institutions*. The Home Government appoints and controls the chief public offices. There is, however, a legislative body wholly or partly elected, but upon whose legislation the Home Government exercises a veto power. Malta, Jamaica, and British Guiana are examples.

(c) Colonies which have *responsible government*. These have their own parliaments and their own executive officers. The Home Government appoints the Governor-General. Its policy is to allow the colonies the utmost freedom in matters of government, except where they affect the Empire as a whole, and even then the veto is rarely exercised. The Dominion of Canada, the Commonwealth of Australia, and the Union of South Africa are examples. Self-governing Colonies are represented in London by appointed agents.

Protectorates are countries which, with regard to their foreign relations, are under the exclusive control of the King. British Central Africa, Uganda, and Nigeria are examples.

THE CONSTITUENT PARTS OF THE BRITISH EMPIRE OUTSIDE THE UNITED KINGDOM

I. IN EUROPE

Gibraltar. The rock of Gibraltar, which was taken from the Spaniards in 1704, is a strong fortress and coaling station at the entrance to the Mediterranean Sea, near the southern extremity of Spain. Its area is about two square miles. It has an inclosed harbour and three graving-docks capable of accommodating

the largest battleships in the British Navy. It is a Crown Colony, with the Commander of the garrison as Governor.

Malta. A strongly fortified island in the Mediterranean Sea, seventeen miles long and



Gibraltar.

nine wide, with an area of 92 square miles, was taken from the French in 1800. The colony includes the adjoining islands of *Gozo* and *Comino*. It is about half-way between Gibraltar and the Mediterranean entrance to the Suez Canal. The principal harbour is one of the finest in the world and has graving-docks to accommodate the largest sized battleships. The capital is Valetta. The government is administered by a governor aided by a council, part of which is elected.

II. IN ASIA

The Indian Empire. This empire includes all the territory south of the Himalayas and also Burma, Baluchistan, the Andaman, Nicobar, and Laccadive groups of islands, Aden and its dependencies, Perim, Sokotra, and the Kuria Muria Islands, and the Bahrein Islands.

India is very densely peopled; for while its area is not quite half that of Canada, its population is almost equal to that of North America, South America, and Africa together. There are many nations and peoples speaking different

languages in India. It is as incorrect to think of it as a single nation as it would be to think thus of the continent of Europe. There are also many religious sects in India — Hindus, Mohammedans, Buddhists, and many others — all disliking one another. Thus the people of India are not united in blood, or language, or religion. Such divisions have always prevailed. By the use of them the East India Company, which began trading there in 1600, acquired territory and influence. This company gradually increased its power until 1858, when the government of the country was transferred from the Company to the Queen of England. In 1877 the Queen became Empress of India, and the present king of England is Emperor of India.

British enterprise has done much for the country. Irrigation canals have been constructed and railways built so that a season of drought no longer causes famines. More than 30,000 miles of railway are now open, and good roads have been constructed everywhere.

To understand how the country is governed, it must be remembered that the whole country is divided into two parts, British Territory and



The harbour of Aden, with a group of natives in characteristic posture.

Native States. The British territory is entirely under the control of the government of the United Kingdom. It is subdivided into a num-

ber of provinces, as Bengal, Bombay, Madras, Punjab, Burma, etc. Over all is the Governor-General, and over each province there is a governor appointed by the British Government. There is no parliament to make laws, as in Canada,—these are made by men appointed to their posts. In the Native States the laws are made by native princes, assisted by British agents.

Burma, the largest province of the Indian Empire, was annexed after the Burmese war of 1883-1886. It lies between Eastern Bengal and Assam, and the Bay of Bengal on the west, and China, French Indo-China, and Siam on the east. It is a mountainous country, with immense forests. The capital is Rangoon. The chief exports are rice and teak.

The Andaman Islands lie in the Bay of Bengal. Since 1858 they have been used by the Indian Government as a penal settlement. Port Blair, the capital, has a fine harbour. The chief export is lumber.

The Nicobar Islands were occupied by the British in 1869. The chief product is cocoa-nuts.

The Laccadive Islands are a group of small coral islands, 200 miles west of the Malabar coast of Madras Presidency, in which they are included.

Baluchistan comprises the country along the southern extremity of the Arabian Sea from Persia to the Punjab. It is an important outlying defence for India. British troops occupy Quetta, which commands the Bolan Pass. It was considered an independent state until 1876. Since that time various parts have been added to the Indian Empire.

Aden, a strongly fortified coaling station at the southern extremity of Arabia, has an area of 80 square miles, and is the key to the Red Sea. It was occupied by the British in 1839. It is a part of the Presidency of Bombay.

Perim, is a small island used for a lighthouse since 1857, and for coaling purposes; the Kuria Muria islands, and Sokotra, an African island, annexed to the Empire in 1886, are, like Aden, under the control of the Government of Bombay.

The Bahrein Islands, a group of islands in the Persian gulf, have been a British protectorate since 1875. The commercial centre and capital is Manameh. The chief export is pearls.

Ceylon, a large island about half the size of England and Wales, lies 60 miles south of Hindustan. It was taken from the Dutch in 1796. It is noted for its pearl-fisheries. Its chief exports are tea, coco-nut products, and plumbago. It is a crown colony, with Colombo as capital.

The Maldivé Islands, a group of coral islands, 500 miles west of Ceylon, is a dependency of Ceylon.

Cyprus, the third largest island in the Mediterranean Sea, was formerly a part of the Turkish Empire, but was annexed to the British Empire in October, 1914, on the occasion of Turkey declaring war against the British, French, and Belgians. It is administered as a Crown Colony. Its capital is Nicosia. Its chief exports are oranges and lemons, raisins and wine, wheat and barley, wool and hides.

The Straits Settlements. The crown colony of the Straits Settlements consists of a number of separate parts—Singapore, Penang, Malacca, Christmas Island, Labuan, etc. The capital of the Settlements is Singapore, a very important, strongly-fortified shipping port, which was ceded to the United Kingdom in 1824. It commands the commercial channels to the East Indies, China, and Japan. Tin is an important export.

The Federated Malay States are situated on the mainland of the Malay Peninsula. They form a protectorate of the United Kingdom.

British North Borneo, Brunei, and Sarawak, are three British protectorates in the Island of Borneo which were acquired in 1840.

British North Borneo is about as large as Ireland. South of this protectorate, along the west coast is Brunei, with an area of about 3,000 square miles, and south of Brunei is Sarawak, a country about as large as England. The products are pearls, oysters, sponges, and fish from the sea, and timber for cabinet work from the forests. Coal is abundant, and gold mines are worked. Spices, rubber, sago, and camphor are the chief exports.

Labuan, an island 30 miles in area, off the north-west coast of Borneo, was ceded to the United Kingdom in 1846 by the Sultan of Borneo. It has a fine harbour and extensive coal-mines.



Hindu pilgrims at a bathing place on one of the sacred streams.

Hong Kong, a crown colony, consists of an island 30 square miles in area, situated at the mouth of the Canton River, which was ceded to the United Kingdom in 1842, and a small peninsula on the mainland, which was acquired in 1861. Victoria, the capital, is one of the greatest trade centres of the world. It is also a great military and naval station, being called the "Gibraltar of the East." It has dry-docks capable of holding the largest vessels.

Wei-hai-wei comprises a number of small islands and a strip of territory on the Shantung Peninsula in China, 10 miles wide. It was leased to the United Kingdom in 1898 by China, and is a British naval station. The territory is administered by the Admiralty.

III. IN AFRICA

British South Africa. This vast territory extends from the Indian Ocean on the south to the Congo Independent State on the north, and from German South-West Africa and Angola on the west to the Indian Ocean, and Portuguese East Africa on the east. It comprises the *Union of South Africa*, *Basutoland*, *Bechuanaland*, and *Rhodesia*.

The Union of South Africa. This consists of the four provinces now called *Cape of Good Hope* and its dependencies, *Natal* and its dependencies, *Orange Free State*, and *Transvaal*.

Cape of Good Hope was acquired in 1806 by conquest from the Dutch. Its area is 277,000 square miles. Wheat, oats, and barley are grown. Sheep, cattle, and ostriches are raised, and diamonds and gold are extensively mined. The capital is Cape Town.

Natal lies along the east coast from Cape Colony to Portuguese East Africa. Its area is about 36,000 square miles. The soil is fertile. Sugar, coffee, and tea are grown. Sheep-rearing is an important industry. Coal is extensively mined and exported. Pietermaritzburg is the capital and Durban the only port. A small party of Englishmen formed a settlement here in 1824; in 1856 it became a separate colony and in 1909 entered the South African Union.

Orange Free State has an area of about 50,000 square miles. Its capital is Bloemfontein.

The chief industry is raising cattle and sheep. Diamonds are found, and rich coal-mines exist. The chief exports are wool, ostrich feathers, hides and diamonds. It was annexed to the British Crown in 1900.

Transvaal lies between Portuguese East Africa on the east, and Cape Colony and Bechuanaland Protectorate on the west, and between Orange Free State on the south, and Rhodesia on the north. Its area is 111,000 square miles. In the main it is a stock-raising country, but it is very rich in minerals, of which gold, coal, and diamonds are the chief. The capital is Pretoria. It was annexed to the British Crown in 1900.

Rhodesia, named after the late Cecil Rhodes, is a large territory extending from Transvaal northward to Nyasaland, and from Portuguese East Africa westward to Portuguese West Africa, or Angola. Its area is about 440,000 square miles. The whole territory is adminis-

tered by the British South Africa Company, under royal charter dated 1889. The political capital is Salisbury, and the commercial centre is Bulawayo. The country produces gold, silver, copper, coal, diamonds, and other minerals. Tobacco, rubber, cotton, and all kinds of grain do well.

Basutoland, a Crown Colony since 1884, is surrounded by Cape Colony, Natal, and the

Orange River Colony. It is a well-watered plateau, on which fine wheat is grown and large numbers of cattle raised.

Bechuanaland, a protectorate since 1885, lies between Cape Colony on the south, and the Zambesi River and Rhodesia on the north, and between the Transvaal on the east and German South-West Africa on the west. Its area is about 275,000 square miles. Cattle-rearing and agriculture are the chief industries.

BRITISH WEST AFRICA

British West Africa comprises the Gambia Colony and Protectorate, Sierra Leone Colony and Protectorate, the Gold Coast Colony, with Ashanti and Northern Territories, Southern Nigeria Colony (Lagos) and Protectorate, and Northern Nigeria Protectorate.

Gambia, a small crown colony and protectorate of about 4,000 square miles, lies on both



Cape Town at the foot of Table Mountains.

banks of the Gambia River. Its capital is Bathurst. The chief export is ground-nuts, which are sent chiefly to Marseilles. It was seized as a trading post in the latter part of the seventeenth century.

Sierra Leone. The crown colony of Sierra



A street bazaar on the Nile above Cairo.

Leone and the Protectorate lie between Liberia and French Guinea. The area is about 34,000 square miles. The capital is Freetown, which has the best harbour on the West African coast, and is used as an imperial coaling station. The exports include palm-oil, palm-kernels, cola-nuts, and india-rubber. Sierra Leone was ceded to Great Britain in 1787 by the native chiefs.

Gold Coast Colony, a crown colony, stretches for 334 miles along the north shore of the Gulf of Guinea, between French Ivory Coast and German Togoland. The area of the colony and adjacent protectorate is about 82,000 square miles. The chief exports are gold, rubber, palm-oil, cocoa and mahogany. The climate is hot, damp, and unhealthy. The capital is Accra. This colony was acquired by settlement from 1618 onward and by conquest.

Southern Nigeria. This colony and protectorate lies between Dahomey on the west and Camerooon on the east. It includes the colony and protectorate of Lagos. Area about 77,000 square miles. The capital is Lagos. Cotton, maize, palm-oil, ivory, gum, rubber and mahogany are exported.

Northern Nigeria, a protectorate established in 1900, lies between Southern Nigeria on the

south and the French possessions on the north. The area is about 256,000 square miles. It exports palm-oil, rubber, ivory, ground-nuts, ostrich feathers, and tin.

IV. BRITISH EAST AND CENTRAL AFRICA

A portion of the continent north of Natal, both on the coast and inland, is under British protection, and is administered directly by the Home Government. This territory comprises the Protectorates of *East Africa*, *Uganda*, *Nyasaland*, formerly known as *British Central Africa*, *Zanzibar*, and *Somaliland*.

The East Africa Protectorate with an area of 177,000 square miles, extends along the coast from German East Africa to Italian Somaliland, and inward to the Uganda Protectorate, the Belgian Congo, and the Egyptian Sudan. It exports rubber, ivory, and hides. The climate is healthful and the soil fertile. The capital is Nairobi. Mombasa, the chief town, possesses a fine harbour. This Protectorate was acquired by treaties with African chiefs and with the Sultan of Zanzibar.

Uganda Protectorate lies to the north-west of Lake Victoria, and reaches to Lake Albert. Its area is about 117,000 square miles. It exports ivory and skins. It was proclaimed a Protectorate in 1894.

Zanzibar Protectorate consists chiefly of two



The Port of Suez, an important commercial distributing point.

islands, Zanzibar and Pemba, off the coast of German East Africa. The soil is fertile. The chief exports are ivory, cloves, and rubber. The city of Zanzibar has a fine harbour and an extensive commerce. It has been a Protectorate since 1890.

Nyasaland Protectorate, which until 1907 was known as British Central Africa, lies west of Lake Nyasa. Blantyre is the chief town. The exports are coffee, cotton, tobacco, and ivory. It was proclaimed a Protectorate in 1891.

The Somaliland Protectorate lies along the coast of the Gulf of Aden. Its area is about 68,000 square miles. It exports hides, ostrich feathers, gum, cattle, and sheep. The chief town is Berbera. In 1884 a Protectorate was declared over a part of Somaliland.

Egypt, while nominally a dependency of Turkey, is, since 1883, in reality a protectorate of the United Kingdom. A British army of 5,000 is maintained in the country. Agriculture is the one great industry of Egypt, and cotton, wheat, rice, and sugar are the staple crops. Cairo, the largest city in Africa, is the capital.

Mauritius, an island of volcanic origin in the Indian Ocean, 500 miles east of Madagascar, has an area of about 700 square miles. It is a crown colony, with representative institutions, and is an important naval station in the East. Sugar is the great export. The capital is Port Louis, on an excellent harbour.

The Seychelles Islands, a group of 89 islands in the Indian Ocean, about 1,000 miles from the African coast, is a crown colony. They were captured from the French in 1794. The capital, Victoria, is an important coaling station with a safe and commodious harbour. The chief exports are vanilla and cocoa-nut oil.

Ascension, a barren, mountainous island of volcanic origin in the South Atlantic Ocean, is a British naval station. It is now used as a naval coaling station and a sanatorium for sailors. Its government is administered by the Admiralty.

St. Helena, an island of volcanic origin with an area of forty-seven square miles, was taken from the Dutch in 1673. It was to this island Napoleon Bonaparte was banished in 1815. It is a fortified coaling station about 1,200 miles from the west coast of Africa. Its capital is Jamestown.

V. IN AMERICA

The Dominion of Canada. In 1867 the Dominion of Canada was formed of the four original provinces—Upper Canada (Ontario), Lower Canada (Quebec), New Brunswick, and Nova Scotia. In 1869 the North-West Territories were added to the Dominion by purchase from the Hudson's Bay Company, and the province of Manitoba was set apart out of a portion of it, and admitted to the Confederacy in 1870. British Columbia became a part of the union in 1871, and Prince Edward Island in 1873. The

provinces of Saskatchewan and Alberta were organized and admitted in 1905.

Newfoundland is the oldest English colony. In 1583 Sir Humphrey Gilbert took possession of the island for Great Britain.

Jamaica, a crown colony, with representative institutions, lies 90 miles south of Cuba. Its area is about 4,000 square miles. It is hilly and mountainous. Its exports are sugar, rum, coffee, and fruits—chiefly bananas and oranges. The capital is Kingston, an important coaling station. *Turks and Caicos Islands* are dependencies of Jamaica. Turtles, salt and sponges are exported.

Jamaica was wrested from the Spaniards in 1655, and it was formally ceded to Great Britain by the Treaty of Madrid in 1670.

Leeward Islands. The Leeward Islands, under British control, have an area of about 700 square miles, and form a crown colony with a partly elected legislative assembly. They lie south-east of Porto Rico and north of the Windward Islands. Their chief exports are sugar, molasses, cotton, and fruits. The capital is St. John on Antigua Island. Many of these islands were settled by English families under Sir Thomas Warner between 1623 and 1632.

Windward Islands. These lie between Martinique and Trinidad. They consist of the three crown colonies, St. Lucia, St. Vincent, and Grenada, with the Grenadines. They export sugar, cocoa, spices, and cotton. The area of the group is about 500 square miles. These islands were acquired by conquest from France.

Barbados, the most eastern of the Windward Islands, has an area of 166 square miles. The exports are sugar, molasses, rum, and cotton. It has representative institutions, although not responsible government. Its capital is Bridgetown. It was settled by English colonists in 1625.

Trinidad and Tobago, the most southerly of the West Indies, lie close to the coast of South America. The area of Trinidad is about 1,750 square miles. They are a crown colony with Port of Spain as the capital. The chief exports are asphalt, sugar, rum, molasses, and cocoa. Trinidad was captured from the Spaniards in 1797.

Bahama Islands, a chain of coral islands, of which about 20 are inhabited, lie off the south-east coast of Florida. Their area is about 5,500 square miles. Sponge-gathering and fruit-growing are the chief industries. Sponges, pine-apples, oranges, and tomatoes are exported. These islands, originally settled by the English from 1629 onwards, are a crown colony with Nassau as capital.

Bermudas, a group of about 360 small islands, of which fifteen or sixteen are inhabited, lie in

the Atlantic about 600 miles east of North America. They form an important naval base, with dockyard and victualling establishment. They export onions, potatoes, and lily bulbs. The government is similar to that of Barbados; the capital is Hamilton.

Honduras, a crown colony on the east coast of Central America has an area of about 7,500 square miles. The country, which is flat near the coast and hilly in the interior, is almost a primeval forest. The exports are mahogany and logwood. Belize is the capital. Honduras was taken from Spain in 1798.

British Guiana, a colony with representative institutions, but not responsible government, lies along the north-eastern part of South America. Its area is about 90,000 square miles. Its exports are sugar, gum, and gold. Georgetown is the capital. It was taken from the Dutch and French toward the close of the 18th century and was finally ceded to the United Kingdom in 1814 by the Treaty of Paris.

Falkland Islands, a group of about 100 islands, two of which are of considerable size, lie about 300 miles east of the Strait of Magellan. Their area is about 6,500 square miles. In 1833 they were taken possession of to protect the whale fishery of the Southern Seas. Sheep-farming is the staple industry. The

government is that of a crown colony; Port Stanley, the capital, is a coaling station.

South Georgia, an uninhabited group of islands, south-east of the Falkland Islands, is attached to them.

VI. IN AUSTRALASIA AND OCEANIA

The Commonwealth of Australia. The Commonwealth of Australia was inaugurated at Sydney on January 1st, 1901. It consists of the six original States of New South Wales, Victoria, Queensland, South Australia, Western Australia, and Tasmania. The government is similar to that of Canada. The area of the Commonwealth is estimated at 3,000,000 square miles, and the population at over 4,000,000. The capital is Canberra. Until the government buildings are erected, Melbourne is the seat of government.

Australia and the neighboring islands were acquired for the Empire by settlement and not by conquest. The first settlement, that at Port Jackson, dates back to 1788.

Dominion of New Zealand. The Dominion of New Zealand consists of three main islands, known as North, South, and Stewart Islands, with several groups of smaller islands, as the Chatham Islands, and the Cook Islands. The area is nearly 105,000 square miles, and the capital is Wellington. The first settlement was made in New Zealand in 1840, at Wellington, on land purchased from the Maoris.

The British Solomon Islands. This group of islands with an area of about 8,500 square miles lies east of New Guinea. They are of volcanic origin. The exports are cocoa-nuts, sweet potatoes, pineapples, and bananas. The Protectorate was proclaimed in 1893.

Fanning Island, a coral island 15 square miles in area, is a station for the submarine cable between Vancouver and Australia.

Fiji, a group of from 200 to 250 islands of volcanic origin, of which about 80 are inhabited, lies 1,100 miles north of New Zealand. The area of this fertile group is about 7,500 square miles.

The chief exports are sugar, copra (the dried kernel of the cocoa-nut), and bananas. The capital of this crown colony is Suva. Fiji was ceded by the native king and people to the United Kingdom in 1874.

The Gilbert and Felice groups of islands form a protectorate having an

area of about 166 square miles. They are covered with cocoa-nut palms, and hence the chief export is copra.

The New Hebrides is a group of volcanic islands free from coral reefs. Their area is 5,000 square miles. The principal exports are copra, bananas, and coffee. They are under the joint management of British and French naval officers.

Papua, formerly British New Guinea, comprises the southern and south-eastern shores of the island, and some groups of small islands lying near the coast. The area is about 90,000 square miles. The capital is Port Moresby. It became a part of the Empire in 1888 as a dependency of the Commonwealth of Australia.

The Tonga, or Friendly Islands. These islands mostly of coral formation lie east and south-east of Fiji. Their area is about 390 square miles. The protectorate, the capital of which is Tongatabu, was proclaimed in 1899.



Cattle grazing in the rich, level land of Tasmania.

REFERENCE TABLES

Areas of the Oceans (Estimated by Ravenstein)

Ocean	Area in Square Miles
Arctic	5,285,000
Antarctic	5,731,350
Indian	28,615,600
Atlantic	34,801,400
Pacific	67,699,630

Areas and Population of the Principal Countries of the World

(Based upon the Statesmen's Year Book for 1911)

NORTH AMERICA		
Year	Area	Population
1909 Belize	8,600	44,000
1911 Canada	3,729,665	7,192,000
1909 Costa Rica	18,400	368,000
1910 Cuba	44,000	2,150,000
1910 Guatemala	48,290	1,992,000
1909 Haiti (Island)	28,250	2,639,000
1905 Honduras	46,000	500,000
1910 Mexico	767,000	15,063,000
1909 Newfoundland	42,700	234,000
1910 Nicaragua	49,200	600,000
1906 Salvador	7,225	1,116,000
1910 United States	3,565,000	92,036,000
SOUTH AMERICA		
1909 Argentina	1,136,000	6,805,000
1908 Brazil	3,219,000	21,461,000
1909 British Guiana	90,000	305,000
1908 Bolivia	605,400	2,049,000
1908 Chile	293,000	3,302,000
1908 Colombia	435,000	4,303,000
1909 Dutch Guiana	46,000	83,000
1909 Ecuador	116,000	1,272,000
1906 French Guiana	30,500	40,000
1905 Paraguay	171,000	631,000
1908 Peru	696,000	4,609,000
1909 Uruguay	72,200	1,095,000
1909 Venezuela	394,000	2,686,000
EUROPE		
1914 Albania	11,000	805,000
1910 Austria-Hungary	241,300	49,419,000
1909 Belgium	11,400	7,452,000
1914 Bulgaria	43,300	4,329,000
1906 Denmark	15,500	2,605,000
1911 England	50,200	34,043,000
1910 France	207,000	39,602,000
1910 Germany	208,700	64,903,000
1914 Greece	41,900	4,363,000
1911 Ireland	32,600	4,382,000
1910 Italy	110,500	34,565,000
1913 Montenegro	5,600	516,000

Year	Area	Population
1909 Netherlands	12,600	5,898,000
1910 Norway	125,000	2,392,000
1907 Portugal	35,500	5,669,000
1912 Rumania	50,700	7,230,000
1909 Russia	1,997,000	132,997,000
1911 Scotland	30,000	4,759,000
1905 Servia	19,000	2,688,000
1910 Spain	195,000	19,503,000
1909 Sweden	173,000	5,476,000
1910 Switzerland	16,000	3,742,000
1914 European Turkey	10,800	1,891,000
1911 Wales	7,400	2,032,000

ASIA		
	17,000,000	950,000,000
1910 Afghanistan	250,000	4,750,000
1910 Arabia	1,000,000	1,050,000
1910 Asiatic Turkey	693,000	17,682,000
1910 Baluchistan	131,000	1,000,000
1905 Borneo	244,000	1,420,000
1905 Celebes	71,000	852,000
1909 Chinese Empire	4,277,000	439,214,000
1911 India (British)	1,766,000	315,000,000
1906 Indo-China (French)	256,000	16,315,000
1910 Japanese Empire	260,000	66,830,000
1905 Java	51,000	30,098,000
1910 Nepal	54,000	5,000,000
1910 Persia	628,000	9,500,000
1903 Philippines	128,000	7,635,000
1909 Russia in Asia	6,207,000	24,082,000
1909 Siam	195,000	6,250,000
1905 Sumatra	161,000	4,030,000

AFRICA		
	11,500,000	130,000,000
1910 Abyssinia	432,000	5,000,000
1910 British Africa other than the Union of South Africa	1,733,000	28,027,000
1910 Congo (Belgian)	910,000	20,000,000
1907 Egypt	400,000	11,287,000
1910 French Africa including Algeria, Tunis, and Mada- gascar	4,422,000	24,576,000
1910 German Africa	931,000	14,120,000
1910 Italian Africa	590,000	1,000,000
1910 Liberia	40,000	2,000,000
1910 Morocco	219,000	5,000,000
1910 Portuguese Africa	793,000	8,248,000
1910 Tripoli	406,000	523,000
Union of South Africa :		
1904 Cape of Good Hope	277,000	2,510,000
1909 Natal	36,000	1,249,000
1904 Orange Free State	50,000	479,000
1910 Transvaal	111,000	1,400,000
1910 Spanish Africa	80,000	292,000

OCEANIA		3,500,000	6,000,000	Year	Area	Population
Year		Area	Population			
1910	Hawaii	6,500	191,000	1911	South Australia	380,070 413,000
1910	New Guinea	373,000	1,602,000	1911	Northern Territory	523,620 3,000
1910	New South Wales	310,300	1,665,000	1908	Tasmania	26,375 185,000
1910	New Zealand	105,000	1,048,000	1909	Victoria	88,000 1,303,000
1909	Queensland	670,500	578,000	1910	West Australia	975,900 284,000

Area and Population of Canada (*Based on reports of Department of Interior.*)

PROVINCES AND TERRITORIES	WHEN ADMITTED OR ORGANIZED	AREA			POPULATION
		Land	Water	Total	
Ontario	July 1, 1867	366,908	40,354	407,262	2,523,000
Quebec	" "	696,717	10,117	706,834	2,003,000
New Brunswick	" "	27,911	74	27,985	352,000
Nova Scotia	" "	21,068	360	21,428	492,000
Manitoba	July 15, 1870	242,427	9,405	251,832	456,000
British Columbia	July 20, 1871	355,161	2,439	357,600	392,000
Prince Edward Island	July 1, 1873	2,184		2,184	93,700
Saskatchewan	Sept. 1, 1905	242,332	8,318	250,650	492,000
Alberta	" "	251,180	2,360	253,540	375,000
Yukon Territory	June 13, 1898	206,427	649	207,076	8,512
North-West Territories	Sept. 1, 1905	1,194,594	51,680	1,246,274	16,951

Cities and Towns in Canada by Provinces

ONTARIO

(Census, 1911.)

Cities	Population	Cities	Population
Belleville	9,876	Ottawa	87,062
Berlin	15,196	Peterborough	18,360
Brantford	23,132	Port Arthur	11,220
Chatham	10,770	St. Catharines	12,484
Fort William	16,499	St. Thomas	14,054
Galt	10,200	Sault Ste. Marie	10,984
Guelph	15,175	Stratford	12,946
Hamilton	81,969	Toronto	376,538
Kingston	18,874	Windsor	17,829
London	46,300	Woodstock	9,320
Niagara Falls	9,248		

Towns	Population	Towns	Population
Alexandria	2,323	Copper Cliff	3,082
Almonte	2,452	Cornwall	6,598
Amherstburg	2,560	Deseronto	2,013
Arnprior	4,405	Dundas	4,299
Aurora	1,901	Dunnville	2,861
Aylmer	2,102	Gananoque	3,804
Barrie	6,420	Goderich	4,522
Blind River	2,558	Haileybury	3,874
Bowmanville	2,814	Hanover	2,342
Bracebridge	2,776	Hawkesbury	4,400
Brampton	3,412	Hespeler	2,368
Brockville	9,374	Huntsville	2,358
Campbellford	3,051	Ingersoll	4,763
Carleton Place	3,621	Kenora	6,158
Clinton	2,254	Kincardine	1,956
Cobalt	5,638	Leamington	2,652
Cobourg	5,074	Lindsay	6,964
Collingwood	7,000	Listowel	2,289

Towns	Population	Town	Population
Meaford	2,811	Rockland	3,397
Midland	4,663	St. Marys	3,388
Napanee	2,807	Sandwich	2,302
New Liskeard	2,108	Sarnia	9,947
Newmarket	2,996	Seaforth	1,983
North Bay	7,737	Simcoe	3,227
North Toronto	5,362	Smith's Falls	6,370
Oakville	2,372	Steeleton	3,936
Orangeville	2,340	Strathroy	2,823
Orillia	6,828	Sturgeon Falls	2,190
Oshawa	7,436	Sudbury	4,150
Owen Sound	12,558	Thessalon	1,945
Paris	4,098	Thorold	2,273
Parry Sound	3,429	Tillsonburg	2,758
Pembroke	5,626	Trenton	3,988
Penetanguishene	3,568	Walkerton	2,601
Perth	3,588	Walkerville	3,302
Petrolia	3,518	Wallaceburg	3,438
Picton	3,564	Waterloo	4,359
Port Hope	5,092	Welland	5,318
Prescott	2,801	Whitby	2,248
Preston	3,883	Warton	2,266
Renfrew	3,846	Wingham	2,238
Ridgetown	1,954		

QUEBEC

(Census, 1911.)

Cities	Population	Cities	Population
Hull	17,585	Salaberry de Valley-	
Levis	7,448	field	9,447
Montreal	466,197	Sherbrooke	16,405
Quebec	78,067	Sorel	8,419
St. Hyacinthe	9,797	Three Rivers	14,441

Cities and Towns in Canada by Provinces—Continued

QUEBEC—Continued

Towns	Population	Towns	Population
Aylmer.....	3,206	Longueuil.....	4,016
Buckingham.....	3,854	Magog.....	3,999
Chicoutimi.....	5,580	Maisonnette.....	18,674
Conticook.....	3,165	Nicolet.....	2,593
Drummondville.....	1,725	Richmond.....	2,175
Farnham.....	3,560	St. Jerome.....	3,479
Fraserville.....	6,842	St. John.....	5,903
Granby.....	4,750	St. Lambert.....	3,350
Grand Mere.....	4,783	Shawenegan Falls..	4,625
Joliette.....	6,346	Thetford Mines.....	7,261
Lachine.....	10,778	Verdun.....	11,622
Lachute.....	2,407	Victoriaville.....	3,028
Lake Megantic.....	2,399	Westmount.....	14,318
Longue Pointe.....	3,037	Windsor Mills.....	2,233

NEW BRUNSWICK

(Census, 1911)

Cities	Population	Cities	Population
Fredericton.....	7,208	St. John.....	42,499
Moncton.....	11,333		
Towns	Population	Towns	Population
Bathurst.....	960	Richibucto.....	612
Chatham.....	4,662	Sackville.....	1,380
Campbellton.....	3,816	St. Andrews.....	987
Dalhousie.....	1,650	St. George.....	1,629
Edmundston.....	1,821	St. Stephen.....	836
Grand Falls.....	1,539	Shediac.....	1,442
Marysville.....	1,837	Sussex.....	1,906
Milltown.....	1,904	Woodstock.....	3,856
Newcastle.....	2,945		

NOVA SCOTIA

(Census, 1911)

Cities	Population	Cities	Population
Halifax.....	46,601	Sydney.....	17,617
Towns	Population	Towns	Population
Amherst.....	8,973	North Sydney.....	5,418
Dartmouth.....	5,058	Pictou.....	3,179
Dominion.....	2,589	Springhill.....	5,713
Glace Bay.....	16,561	Stellarton.....	1,614
Inverness.....	2,719	Sydney Mines.....	7,464
Kentville.....	2,304	Truro.....	6,015
Liverpool.....	2,109	Westville.....	4,417
Lunenburg.....	2,681	Windsor.....	3,452
New Glasgow.....	6,383	Yarmouth.....	6,571

PRINCE EDWARD ISLAND

City	Population
Charlottetown.....	11,198
Towns	Population
Georgetown.....	1,000
Towns	Population
Summerside.....	2,700

MANITOBA

(Census, 1911)

Cities	Population	Cities	Population
Brandon.....	13,837	St. Boniface.....	7,478
Portage la Prairie..	5,885	Winnipeg.....	135,430

Towns	Population	Towns	Population
Boissevain.....	913	Minnedosa.....	1,483
Carberry.....	878	Morden.....	1,130
Carman.....	1,266	Morris.....	1,897
Dauphin.....	2,215	Neepawa.....	1,863
Deloraine.....	808	Selkirk.....	2,990
Emerson.....	1,043	Souris.....	1,854
Gladstone.....	782	Stonewall.....	1,005
Killarney.....	1,010	Virden.....	1,550

SASKATCHEWAN

(Census, 1911)

Cities	Population	Cities	Population
Moosejaw.....	13,824	Regina.....	30,210
North Battleford...	6,000	Saskatoon.....	12,002
Prince Albert.....	6,254		
Towns	Population	Towns	Population
Arlea.....	794	Moosomin.....	1,143
Battleford.....	1,331	Qu'Appelle.....	850
Broadview.....	702	Rosthern.....	1,172
Estevan.....	1,925	Strasbourg..	811
Grenfell.....	709	Swift Current.....	1,852
Humboldt.....	859	Watrous.....	781
Indian Head.....	1,285	Weyburn.....	2,210
Lloydminster.....	441	Wolseley.....	961
Maple Creek.....	936	Yorkton.....	2,302
Melville.....	1,816		

ALBERTA

(Census, 1911)

Cities	Population	Cities	Population
Calgary.....	43,665	Medicine Hat.....	5,573
Edmonton.....	24,855	Strathcona.....	5,579
Lethbridge.....	8,050	Wetaskiwin.....	2,411
Towns	Population	Towns	Population
Camrose.....	1,586	Macleod.....	1,837
Cardston.....	1,207	Magrath.....	995
Castor.....	1,609	Pincher Creek.....	1,027
Clareholm.....	809	Raymond.....	1,465
Coleman.....	1,557	Red Deer.....	2,118
Didsbury.....	726	Stettler.....	1,444
Fort Saskatchewan..	785	Taber.....	2,321
High River.....	1,173	Vegreville.....	1,029
Lacombe.....	1,021		

BRITISH COLUMBIA

(Census, 1911)

Cities	Population	Cities	Population
Nanaimo.....	8,305	Roseland.....	2,827
Nelson.....	4,563	Vancouver.....	100,333
New Westminster..	13,394	Victoria.....	31,620
Towns	Population	Towns	Population
Chilliwack.....	1,657	North Vancouver...	7,781
Cranbrook.....	2,635	Old Michel.....	1,515
Esquimalt.....	4,001	Point Grey.....	4,319
Fernie.....	1,287	Prince Rupert.....	4,184
Grand Forks.....	1,577	Revelstoke.....	3,010
Hosmer.....	2,019	South Vancouver...	16,021
Kamloops.....	3,772	Trail.....	1,460
Kelowna.....	1,663	Vernon.....	2,671
Ladysmith.....	3,295		

Areas and Population of the United States and its Possessions

(From Thirteenth Census of the United States and United States Geological Survey, Bulletin No. 302, Series F, Geography 53)

STATES	Land Surface	Water Surface	Population
Alabama	51,279	719	2,138,093
Arizona	113,840	116	204,354
Arkansas	52,525	810	1,574,449
California	156,092	2,205	2,377,549
Colorado	103,658	290	779,024
Connecticut	4,820	145	1,114,756
Delaware	1,965	405	202,322
District of Columbia	60	10	331,069
Florida	54,861	3,805	752,619
Georgia	58,725	540	2,609,121
Idaho	83,779	534	325,594
Illinois	56,002	663	5,638,591
Indiana	35,885	469	2,700,867
Iowa	55,586	561	2,224,771
Kansas	81,774	384	1,690,949
Kentucky	40,181	417	2,289,905
Louisiana	45,409	3,097	1,656,388
Maine	29,895	3,145	742,371
Maryland	9,941	2,386	1,295,346
Massachusetts	8,039	227	3,366,416
Michigan	57,480	500	2,810,173
Minnesota	80,858	3,824	2,075,708
Mississippi	46,362	503	1,797,114
Missouri	68,727	693	3,293,335
Montana	145,776	796	376,053
Nebraska	76,808	712	1,192,214
Nevada	109,821	869	81,875
New Hampshire	9,031	310	430,572
New Jersey	7,514	710	2,537,167
New Mexico	122,503	131	327,301
New York	47,654	1,550	9,113,614
North Carolina	48,740	3,686	2,206,287
North Dakota	70,183	654	577,056
Ohio	40,740	300	4,767,121
Oklahoma	69,414	643	1,657,155
Oregon	95,607	1,092	672,765
Pennsylvania	44,832	294	7,665,111
Rhode Island	1,067	181	542,610
South Carolina	30,495	494	1,515,400
South Dakota	76,868	747	583,888
Tennessee	41,687	335	2,184,789
Texas	262,398	3,498	3,896,542
Utah	82,184	2,806	373,351
Vermont	9,124	440	355,956
Virginia	40,262	2,365	2,061,612
Washington	66,836	2,291	1,141,990
West Virginia	24,022	148	1,221,119
Wisconsin	55,256	810	2,333,860
Wyoming	97,594	320	145,965
TERRITORIES			
Alaska	590,884	.....	64,356
Hawaii	6,449	.....	191,909

OTHER POSSESSIONS	Land Surface	Water Surface	Population
Guam	210	.....	11,973
Panama Canal Zone	474	.....	43,000
Philippines, The	115,026	717,942	7,635,426
Porto Rico	3,435	.....	1,118,012
Tutuila, Samoan Islands ..	77	.....	6,668

Leading Cities of the United States

POPULATION (over 100,000)

Population	Population
New York, N. Y. 4,766,883	St. Paul, Minn. 214,744
Chicago, Ill. 2,185,283	Denver, Colo. 213,381
Philadelphia, Pa. 1,549,008	Portland, Oreg. 207,214
St. Louis, Mo. 687,029	Columbus, Ohio 181,511
Boston, Mass. 670,585	Toledo, Ohio 168,497
Cleveland, Ohio 560,663	Atlanta, Ga. 154,839
Baltimore, Md. 558,485	Oakland, Cal. 150,174
Pittsburg, Pa. 533,905	Worcester, Mass. 145,986
Detroit, Mich. 465,766	Syracuse, N. Y. 137,249
Buffalo, N. Y. 423,715	New Haven, Conn. 133,605
San Francisco, Cal. 416,912	Birmingham, Ala. 132,685
Milwaukee, Wis. 373,859	Memphis, Tenn. 131,105
Cincinnati, Ohio 363,591	Scranton, Pa. 129,867
Newark, N. Y. 347,469	Richmond, Va. 127,628
New Orleans, La. 339,075	Paterson, N. J. 125,600
Washington, D. C. 331,069	Omaha, Nebr. 124,096
Los Angeles, Cal. 319,198	Fall River, Mass. 119,295
Minneapolis, Minn. 301,408	Dayton, Ohio 116,577
Jersey City, N. Y. 267,779	Grand Rapids, Mich. 112,000
Kansas City, Mo. 248,384	Nashville, Tenn. 110,365
Seattle, Wash. 237,194	Lowell, Mass. 106,294
Indianapolis, Ind. 233,650	Cambridge, Mass. 104,839
Providence, R. I. 224,326	Spokane, Wash. 104,402
Louisville, Ky. 223,928	Bridgeport, Conn. 102,054
Rochester, N. Y. 218,149	Albany, N. Y. 100,258

Population of the Principal Cities of the World

(Largely based on the Statesman's Year Book, 1911)

NORTH AMERICA		Year	Population
British America—		1906	San Salvador 59,000
Year	Population	1906	Managua ... 35,000
1911	Montreal 466,000	1908	San José 27,000
1911	Toronto 376,000	Mexico—	
1911	Winnipeg ... 135,000	1910	Mexico 470,000
1911	Vancouver .. 100,000	1910	Guadalajara. 119,000
1911	Ottawa 86,000	United States—	
1911	Hamilton ... 81,000	(See above)	
1911	Quebec 78,000	West Indies—	
1911	London 46,000	1910	Havana 303,000
1911	Halifax 46,000	1908	Port au Prince 100,000
1911	Calgary 43,000	1909	Cienfuegos .. 70,000
1911	St. John 42,000	1910	Matanzas ... 64,000
1909	St. John's ... 32,000	1910	Santiago 54,000
1911	Victoria 31,000	1910	Kingston ... 47,000
Central America—			
1906	Guatemala .. 125,000		
1906	Leon 63,000		

Population of the Principal Cities of the World

*Continued***SOUTH AMERICA****Argentina—**

Year	Population
1909 Buenos Aires	1,303,000
1909 Rosario	176,000
1909 La Plata	95,000
1909 Tucuman	75,000
1909 Cordoba	70,000

Bolivia—

1909 La Paz	79,000
1909 Cochabamba	25,000
1909 Sucre	23,000

Brazil—

1909 Rio de Janeiro	1,000,000
1909 Sao Paulo	400,000
1909 Bahia	230,000
1909 Belem	200,000
1909 Pernambuco	150,000

Chile—

1907 Santiago	333,000
1907 Valparaiso	162,000

Colombia—

1910 Bogota	150,000
1910 Medellin	60,000
1910 Barranquilla	40,000

Ecuador—

1909 Guayaquil	80,000
1909 Quito	70,000

Guiana—

1909 Georgetown	53,000
1909 Paramaribo	35,000
1906 Cayenne	12,000

Paraguay—

1905 Asuncion	60,000
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Peru—

1908 Lima	141,000
1908 Arequipa	37,000
1908 Callao	31,000
1908 Cuzco	12,000

Uruguay—

1909 Montevideo	318,000
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Venezuela—

1904 Caracas	90,000
1905 Maracaibo	50,000

EUROPE**Austria-Hungary—**

1910 Vienna	2,031,000
1900 Budapest	732,000
1910 Trieste	229,000
1910 Prague	225,000
1910 Lemberg	207,000

Balkan States—

Year	Population
1910 Constantinople	1,200,000
1909 Bukharest	300,000
1910 Salonica	174,000
1907 Athens	167,000
1910 Sofia	103,000
1910 Belgrade	90,000

Belgium—

1909 Brussels	650,000
1909 Antwerp	317,000
1909 Liège	177,000
1909 Ghent	165,000

Denmark—

1906 Copenhagen	514,000
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England and Wales—

1911 Greater London	7,253,000
1911 Liverpool	747,000
1911 Manchester	714,000
1911 Birmingham	526,000
1911 Sheffield	456,000
1911 Leeds	446,000
1911 Bristol	357,000
1911 Bradford	289,000
1911 Newcastle	267,000
1911 Nottingham	260,000
1911 Salford	231,000
1911 Cardiff	182,000

France—

1910 Paris	2,888,000
1910 Marseilles	550,000
1910 Lyons	523,000
1906 Bordeaux	252,000
1906 Lille	206,000
1906 Toulouse	150,000
1906 St. Etienne	147,000
1906 Nice	134,000
1906 Nantes	131,000
1906 Havre	132,000

Germany—

1910 Berlin	2,071,000
1910 Hamburg	932,000
1910 Munich	595,000
1910 Leipzig	588,000
1910 Dresden	547,000
1910 Cologne	516,000
1910 Breslau	512,000
1910 Frankfort-on-Main	415,000

Ireland—

1911 Belfast	384,000
1911 Dublin	309,000
1911 Cork	77,000
1911 Limerick	38,000

Italy—

Year	Population
1909 Naples	596,000
1909 Milan	584,000
1909 Rome	575,000
1909 Turin	371,000
1909 Palermo	319,000
1909 Genoa	275,000
1909 Florence	227,000
1909 Venice	160,000

Netherlands

1909 Amsterdam	568,000
1909 Rotterdam	418,000
1909 The Hague	270,000
1909 Utrecht	118,000

Norway—

1910 Christiania	245,000
1910 Bergen	77,000

Portugal—

1900 Lisbon	356,000
1900 Oporto	168,000

Russia

1908 St. Petersburg	1,870,000
1907 Moscow	1,469,000
1908 Warsaw	764,000
1909 Odessa	520,000
1908 Lodz	394,000
1908 Kiev	320,000
1908 Riga	318,000

Scotland

1911 Glasgow	784,000
1911 Edinburgh	355,000
1911 Dundee	169,000
1911 Aberdeen	163,000

Spain

1910 Madrid	572,000
1910 Barcelona	560,000
1900 Valencia	214,000
1910 Seville	155,000
1910 Malaga	133,000

Sweden—

1909 Stockholm	342,000
1909 Gothenburg	164,000

Switzerland—

1910 Zurich	189,000
1910 Basel	131,000
1910 Geneva	126,000
1910 Bern	85,000

ASIA**Asiatic Russia—**

1904 Tiflis	197,000
1904 Baku	177,000
1904 Tashkend	165,000
1908 Kokand	112,000

British India—

Year	Population
1911 Calcutta	1,216,000
1911 Bombay	973,000
1901 Madras	509,000
1901 Hardarabad	448,000
1911 Rangoon	289,000
1901 Lucknow	264,000
1901 Benares	209,000
1901 Delhi	208,000
1901 Lahore	202,000
1901 Cawnpore	197,000
1901 Arra	188,000
Mandalay	184,000

China—

1909 Canton	1,250,000
1909 Hankow	820,000
1909 Tientsin	800,000
1909 Peking	700,000
1909 Shanghai	651,000
1909 Foochow	624,000
1909 Suchan	500,000
1909 Ningpo	400,000

French Indo-China

1910 Saigon	189,000
1906 Hanoi	103,000
1911 Hué	50,000

East India Islands—

1903 Manilla	220,000
1905 Surabaya	150,000
1905 Batavia	139,000

Japan

1908 Tokyo	2,186,000
1908 Osaka	1,227,000
1908 Kyoto	442,000
1908 Yokohama	394,000
1908 Nagoya	378,000
1908 Kobe	378,000
1908 Nagasaki	176,000
1909 Seoul	150,000

Siam—

1909 Bangkok	629,000
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South-west Asia—

1910 Smyrna	350,000
1910 Damascus	350,000
1910 Teheran	280,000
1910 Aleppo	210,000
1910 Tabriz	200,000
1910 Ispahan	80,000
1910 Mecca	80,000
1910 Jerusalem	80,000
1910 Bagdad	75,000
1910 Kabul	75,000
1910 Kandahar	60,000
1910 Herat	45,000

Population of the Principal Cities of the World

Continued

AFRICA		Year	Population
Year	Population		
1907 Cairo	655,000	1904 Kimberley ..	34,000
1907 Alexandria..	332,000	1910 Mombasa ...	30,000
1907 Tunis.....	250,000	1910 Tripoli	30,000
1904 Cape Town..	169,000	1908 Monrovia ...	8,000
1910 Johannesburg	159,000		
1908 Algiers	154,000	OCEANIA	
1900 Fez.....	140,000	1909 Sydney	606,000
1908 Oran	107,000	1909 Melbourne ..	562,000
1910 Antananarivo	95,000	1909 Adelaide ...	184,000
1909 Durban	59,000	1909 Brisbane....	143,000
1910 Morocco ...	50,000	1906 Auckland ...	82,000
1907 Port Said ...	50,000	1906 Wellington..	64,000
1909 Freetown ...	37,000	1906 Dunedin	56,000
1910 Zanzibar....	35,000	1909 Perth	54,000
1910 Tangier.....	35,000	1910 Honolulu ...	50,000
		1908 Hobart	35,000

Twenty-five Largest Cities in the World

(Largely based on the Statesman's Year Book, 1911)

	Population
1. Greater London, England	7,253,000
2. New York, U. S. A.	4,766,883
3. Paris, France	2,763,393
4. Tokyo, Japan ..	2,186,079
5. Chicago, U. S. A.....	2,185,283
6. Vienna, Austria	2,083,888
7. Berlin, Germany	2,070,153
8. St. Petersburg, Russia	1,678,000
9. Philadelphia, U. S. A.	1,549,008
10. Moscow, Russia	1,359,254
11. Buenos Aires, Argentine Republic	1,302,000
12. Canton, China.....	1,250,000
13. Osaka, Japan	1,226,000
14. Calcutta, India	1,216,000
15. Constantinople, Turkey	1,200,000
16. Singan-fu, China	1,000,000
17. Rio de Janeiro	1,000,000
18. Bombay, India	972,000
19. Hamburg, Germany.....	932,000
20. Hankow, China.....	820,000
21. Tientsin-fu, China	800,000
22. Glasgow, Scotland	784,000
23. Warsaw, Russia.....	764,000
24. Liverpool, England	747,000
25. Budapest, Austria-Hungary	732,000

Other Large Cities in the Different Countries
of the World*(Largely based on the Statesman's Year Book, 1911)*

	Population
1. Aberdeen, Scotland	163,000
2. Adelaide, Australia	184,000
3. Adrianople, Turkey	83,000
4. Agra, India	188,000
5. Aix-la-Chapelle, Germany	156,000

	Population
6. Aleppo, Syria	210,000
7. Alexandria, Egypt.....	332,000
8. Algiers, Algeria	154,000
9. Allahabad, India	172,000
10. Altona, Germany	172,000
11. Amsterdam, Holland	568,000
12. Antananarivo, Madagascar.....	95,000
13. Antwerp, Belgium.....	317,000
14. Arequipa, Peru	37,000
15. Asuncion, Paraguay	60,000
16. Athens, Greece.....	167,000
17. Auckland, New Zealand	82,000
18. Bagdad, Turkey.....	75,000
19. Bahia, Brazil.....	230,000
20. Baku, Asiatic Russia	178,000
21. Bangkok, Siam.....	628,000
22. Barcelona, Spain	560,000
23. Barranquilla, Colombia.....	40,000
24. Basel, Switzerland.....	132,000
25. Batavia, Java	138,000
26. Beirut, Syria.....	150,000
27. Belfast, Ireland	384,000
28. Belgrade, Servia	84,000
29. Benares, India	209,000
30. Bergen, Norway.....	77,000
31. Bern, Switzerland	85,000
32. Birmingham, England	526,000
33. Bogotá, Colombia.....	150,000
34. Bordeaux, France	252,000
35. Bradford, England	289,000
36. Bremen, Germany	246,000
37. Breslau, Germany	511,000
38. Bridgetown, Barbados	35,000
39. Bristol, England	357,000
40. Brussels, Belgium	649,000
41. Bukarest, Roumania	300,000
42. Cairo, Egypt.....	654,000
43. Callao, Peru	31,000
44. Cape Town, Cape of Good Hope.....	169,000
45. Carácas, Venezuela	90,000
46. Cardiff, Wales.....	182,000
47. Charlottenburg, Germany	305,000
48. Chemnitz, Germany.....	287,000
49. Christiania, Norway	242,000
50. Cologne, Germany	516,000
51. Colombo, Ceylon.....	158,000
52. Concepcion, Chile.....	55,000
53. Copenhagen, Denmark	514,000
54. Cracow, Austria-Hungary	150,000
55. Damascus, Syria.....	350,000
56. Danzig, Germany	170,000
57. Delhi, India.....	208,000
58. Dresden, Germany.....	546,000
59. Dublin, Ireland.....	309,000
60. Dundee, Scotland.....	169,000
61. Durban, Natal.....	70,000
62. Dusseldorf	357,000
63. Edinburgh, Scotland	320,000

**Other Large Cities in the Different Countries
of the World—Continued**

	Population		Population
64. Elberfeld, Germany	170,000	120. Milan, Italy	584,000
65. Fez, Morocco	140,000	121. Montevideo, Uruguay	318,000
66. Florence, Italy	227,000	122. Montreal, Quebec, Canada	466,000
67. Frankfort-on-Main, Germany	414,000	123. Mukden, Manchuria, China	158,000
68. Geneva, Switzerland	125,000	124. Munich, Germany	595,000
69. Genoa, Italy	275,000	125. Nagoya, Japan	378,000
70. Georgetown, British Guiana	53,000	126. Nanking, China	267,000
71. Ghent, Belgium	165,000	127. Nantes, France	133,000
72. Gothenburg, Sweden	164,000	128. Naples, Italy	596,000
73. Guadalajara, Mexico	118,000	129. Newcastle-upon-Tyne, England	267,000
74. Guayaquil, Ecuador	80,000	130. Nice, France	134,000
75. Haidarabad, India	448,000	131. Nizhny-Novgorod, Russia	92,000
76. Halifax, Nova Scotia, Canada	46,000	132. Nottingham, England	260,000
77. Hamilton, Ontario, Canada	81,000	133. Nuremberg, Germany	332,000
78. Hanoi, Indo-China	103,000	134. Odessa, Russia	520,000
79. Hanover, Germany	302,000	135. Oporto, Portugal	167,000
80. Havana, Cuba	302,000	136. Ottawa, Ontario, Canada	86,000
81. Havre, France	132,000	137. Palermo, Italy	319,000
82. Helsingfors, Finland	131,000	138. Peking, China	700,000
83. Hobart, Tasmania	25,000	139. Pernambuco, Brazil	150,000
84. Hong-kong, China (British)	337,000	140. Portsmouth, England	231,000
85. Inverness, Scotland	22,000	141. Prague, Austria	224,000
86. Irkutsk, Russia	76,000	142. Pretoria, The Transvaal	37,000
87. Jerusalem, Syria	80,000	143. Quebec, Quebec, Canada	78,000
88. Johannesburg, The Transvaal	158,000	144. Quito, Ecuador	70,000
89. Kiev, Russia	320,000	145. Rangoon, India	289,000
90. Kimberley, Cape of Good Hope	34,000	146. Reims, France	110,000
91. Kingston, Jamaica	47,000	147. Riga, Russia	318,000
92. Königsberg, Germany	245,000	148. Rome, Italy	575,000
93. Kyoto, Japan	442,000	149. Rosario, Argentine Republic	176,000
94. La Paz, Bolivia	78,000	150. Rotterdam, Holland	418,000
95. Leeds, England	446,000	151. Rouen, France	118,000
96. Leicester, England	227,000	152. St. Étienne, France	147,000
97. Leipzig, Germany	587,000	153. St. John, New Brunswick, Canada	42,000
98. Lemberg, Austria	207,000	154. St. John's, Newfoundland	32,000
99. Lhasa, Tibet	20,000	155. Salonica, Turkey	174,000
100. Liège, Belgium	177,000	156. Santiago, Chile	332,000
101. Lille, France	206,000	157. Santiago, Cuba	53,000
102. Lima, Peru	140,000	158. Sao Paulo, Brazil	400,000
103. Lisbon, Portugal	356,000	159. Seville, Spain	155,000
104. Lodz, Russian Poland	394,000	160. Shanghai, China	651,000
105. Lourenço Marques, Port. East Africa	10,000	161. Sheffield, England	456,000
106. Lucknow, India	264,000	162. Singapore, Straits Settlements	229,000
107. Lyons, France	472,000	163. Smyrna, Turkey	350,000
108. Madras, India	509,000	164. Sofia, Bulgaria	102,000
109. Madrid, Spain	571,000	165. Söul, Korea	150,000
110. Magdeburg, Germany	279,000	166. Stettin, Germany	236,000
111. Malaga, Spain	133,000	167. Stockholm, Sweden	341,000
112. Manchester, England	714,000	168. Strasburg, Germany	178,000
113. Manilla, Philippine Islands	220,000	169. Stuttgart, Germany	285,000
114. Maracaibo, Venezuela	50,000	170. Surabaya, Java	150,000
115. Marseilles, France	517,000	171. Sydney, Australia	605,000
116. Mecca, Arabia	80,000	172. Tabriz, Persia	200,000
117. Melbourne, Australia	562,000	173. Tashkend, Asiatic Russia	165,000
118. Messina, Italy	150,000	174. Teherân, Persia	280,000
119. Mexico, Mexico	470,000	175. The Hague, Holland	270,000
		176. Tiflis, Asiatic Russia	197,000
		177. Toronto, Ontario, Canada	376,000

Other Large Cities in the Different Countries of the World—*Continued*

	Population
178. Toulouse, Franco	150,000
179. Trieste, Austria	229,000
180. Tunis, Tunis	250,000
181. Tripoli, Tripoli	30,000
182. Turin, Italy	371,000
183. Utrecht, Netherlands	118,000
184. Valencia, Spain	213,000
185. Valencia, Venezuela	38,654
186. Valparaiso, Chile	162,000
187. Vancouver, British Columbia, Canada	100,000
188. Venice, Italy	160,000
189. Wellington, New Zealand	122,000
190. Winnipeg, Manitoba, Canada	135,000
191. Yokohama, Japan	394,000
192. Zanzibar, Zanzibar	35,000
193. Zurich, Switzerland	189,000

Principal Rivers of the World

NORTH AMERICA

(Based on Longman's Gazetteer of the World)

	Approximate Length in Miles	Approximate Area drained in Square Miles
Missouri-Mississippi	4,194 ¹	1,238,642
Yukon	2,050	440,000
Colorado	2,000	276,000
Rio Grande	1,800	145,200
Columbia	1,400	260,000
Saskatchewan-Nelson	1,392	360,000
Athabaska-Mackenzie	1,100	667,000
St. Lawrence	1,034	297,000

SOUTH AMERICA

Amazon	3,415	2,320,000
Paraná-La-Plata	2,170	1,200,000
São Francisco	1,800	397,000
Orinoco	1,550	365,000

EUROPE

Volga	2,325	563,200
Danube	1,800	315,000
Dnieper	1,334	202,200
Don	1,153	166,130
Northern Dvina	1,100	134,000
Dniester	853	16,510
Rhine	810	86,600
Elbe	720	55,340
Vistula	652	73,000
Tagus	566	31,864
Oder	552	43,300
Loire	543	46,756
Rhone	504	38,000
Seine	425	30,028
Po	418	26,800

ASIA

Ob-Irtysh	3,235	1,150,870
Yangtse-kiang	3,000	700,000
Lena	2,860	908,980

	Approximate Length in Miles	Approximate Area drained in Square Miles
Amur	2,700	787,000
Mekong	2,600	350,000
Yenisei	2,500	792,300
Hwang-ho	2,300	387,150
Indus	2,000	360,050
Brahmaputra	1,800	360,000
Ganges	1,455	397,300

AFRICA

Nile	3,670	1,620,000
Congo	2,800	1,000,000
Niger	2,600	780,000
Zambezi	1,600	550,000

AUSTRALIA

Darling	1,160	198,000
Murray	1,100	270,000

Principal Lakes of the World

NORTH AMERICA

	Area in Sq. Miles	Altitude in Feet
Superior	31,800	602
Huron	23,200	581
Michigan	23,450	581
Great Bear	14,000	391
Erie	10,000	572
Winnipeg	9,400	710
Ontario	7,260	246
Great Slave	7,100	520
Nicaragua	2,975	106
Great Salt ²	2,560	4,218

SOUTH AMERICA

Titicaca	3,261	12,500
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EUROPE

Ladoga	7,000	55
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ASIA

Caspian Sea ²	169,383	86 ¹
Lake Aral ²	26,166	158
Baikal	13,197	1,400
Dead Sea ²	353	1,290 ¹

¹ Below sea level. ² Salt.

AFRICA

Victoria Nyanza	32,167	3,300
Nyassa	10,000	1,577
Tanganyika	14,000	2,670
Chad	10,400	850

Principal Mountains of the World

NORTH AMERICA

	Where Located	Height in Feet
Mt. McKinley	Alaska	20,464
Mt. Logan	Canada	19,539
Orizaba	Mexico	18,314

Principal Mountains of the World—*Continued*NORTH AMERICA—*Continued*

	Where Located	Height in Feet
Mt. St. Elias	Alaska-Yukon Frontier..	18,024
Popocatepetl	Mexico.....	17,550
Wrangell	Alaska.....	17,500
Mt. Whitney.....	California	14,502
Massive Mountain	Colorado	14,424
Mt. Shasta.....	California	14,380
Mt. Rainier	Washington	14,363
Longs Peak	Colorado	14,271
Pikes Peak	Colorado	14,108
Fremont Peak.....	Wyoming.....	13,700
Mt. Hood.....	Oregon	11,225

SOUTH AMERICA

Aconcagua.....	Argentine Republic....	22,860
Coropuna	Peru.....	21,703
Chimborazo	Ecuador	20,498
Misti	Peru.....	20,320
Cotopaxi	Ecuador	19,480
Tolima	Nevalo de Colombia....	18,300

EUROPE

Mont Blanc	France.....	15,780
Monte Rosa.....	Swiss-Italian Frontier..	15,215
Mulhacen	Spain.....	11,781
Pic de Nethou.....	Spain	11,170
Mt. Etna	Italy.....	10,865
Mt. Hecla	Iceland.....	5,096
Mt. Vesuvius	Italy.....	4,260

ASIA

Mt. Everest.....	Himálayas	29,002
Godwin-Austen	Himálayas	28,265
Káncanjangá.....	Himálayas	28,156
Mustagh-ata.....	Pamirs.....	25,800
Elbruz	Russia	18,525
Demavend.....	Persia	18,200
Ararat	Armenia	16,925
Fuji-yama	Japan	12,440
Mt. Hermon	Palestine.....	9,050

AFRICA

Mt. Kenia.....	Brit. East Africa	19,300
Kilima-njaro	Ger. East Africa	19,270
Mt. Ruwenzori	Brit. East Africa	16,600
Ras Dashan	Abyssinia.....	15,000
Tizi Tamjurt	Morocco	14,650
Mongo ma Loba	Kamerun	13,000
Mont aux Sources	(Western Frontier of Natal.....	10,000

OCEANIA

Mauna Kea	Hawaiian Islands	13,953
Mauna Loa	Hawaiian Islands	13,760
Kinabalu	Borneo.....	13,680
Mount Victoria	New Guinea.....	13,205
Mt. Cook	New Zealand	12,350

Average Height of Plateaus

	Feet		Feet
Tibet	14,000	Columbia.....	4,500
Bolivia	12,000	Great Basin.....	4,000
The Pamirs.....	12,000	Gobi.....	4,000
Mexico.....	8,000	Guiana.....	2,500
Abyssinia.....	7,000	Brazil.....	2,000
Australian	5,000	Switzerland.....	2,000
Colorado.....	5,000	Dekkan	2,000

Total Length of Railways of the World

(Based on Statesman's Year Book, 1911)

Continents	Length in Miles
North America	283,724
Europe	202,221
Asia	60,232
South America.....	57,235
Australia and Islands of the Pacific	19,713
Africa	17,173

Length of Railways in the Different Countries

Countries	Length in Miles
Argentine Republic	16,606
Austria-Hungary	29,378
Belgium	2,942
Bolivia	700
Brazil	12,182
British Empire—	
United Kingdom	23,280
India and other Asiatic Possessions	31,490
Canada, Dominion of	24,731
Australia, Commonwealth of	16,652
British Africa	9,250
New Zealand	2,746
Newfoundland and British West Indies	951
British Guiana (South America).....	95
Bulgaria	1,082
Chile	3,290
Chinese Republic.....	4,730
Colombia.....	509
Congo, Belgian	400
Costa Rica	404
Cuba	2,380
Denmark	2,115
Ecuador	325
French Republic—	
France	30,000
Algeria and other African Possessions.....	3,540
Indo-China.....	1,196
New Caledonia (Pacific Ocean)	100
German Empire—	
Germany.....	37,000
German Possessions in Africa	1,000
Kiao-Chou, China	272
Greece	850
Guatemala	555
Honduras	60

Length of Railways in the Different Countries

Continued

Countries	Length in Miles
Italy	10,713
Japan	5,400
Cho-sen	642
Luxemburg	340
Mexico	15,350
The Netherlands (Kingdom of)—	
The Netherlands (Europe)	1,908
Dutch East Indies (Asia)	1,538
Nicaragua	171
Norway	1,912
Ottoman Empire—	
Turkey in Europe	1,239
Turkey in Asia	2,836
Egypt	2,212
Panama	47
Paraguay	160
Peru	1,476
Portugal and Portuguese Africa (771)	2,529
Roumania	2,207
Russian Empire—	
Russia in Europe	34,465
Russia in Asia	10,485
Salvador	122
Santo Domingo and Haiti	155
Servia	430
Siam	650
Spain	9,020
Sweden	8,451
Switzerland	3,131
United States (Republic of)—	
United States	238,356
Alaska	222
Porto Rico	290
Hawaii	215
Philippines	993
Uruguay	1,400
Venezuela	492

Longest Canadian Railways (1910)

	Miles
Canadian Pacific	10,000
Grand Trunk	3,550
Intercolonial and Prince Edward Island	1,720
Canadian Northern	7,000
Grand Trunk Pacific	1,703

Mileage of Railways in Canada

YEAR	1906	1907	1908	1909	1910
Steam	21,429	22,446	22,966	24,104	24,731
Electric	814	815	992	989	992

Canals

RIVER ST. LAWRENCE AND LAKES—

	Length in miles	No. of Locks	Rise in feet
Lachine	8½	5	45
Soulanges	14	5	84
Cornwall	11	6	48
Farran's Point	1	1	3½
Rapide Plat	3½	2	11½
Galops	7½	3	15½
Murray	5½	—	—
Welland	26½	26	326½
Sault Ste. Marie	1½	1	18

OTTAWA AND RIDEAU RIVERS—

St. Anne's Locks	½	1	3
Carillon	½	2	16
Chute à Blondeau	½	—	—
Grenville	5½	5	43½
Rideau	16½	49	282½
Perth Branch	6	2	26

RICHELIEU AND LAKE CHAMPLAIN—

St. Ours Lock and Dam	½	1	5
Chambly	12	9	74

NOTE 1.—The Soulanges Canal takes the place of the Beauharnois Canal.

NOTE 2.—Total length of navigable waters on the Rideau Canal is 126½ miles.

NOTE 3.—The Trent Canal, which is composed of a chain of lakes and rivers, extending from Trenton, at the mouth of the Trent River in the Bay of Quinte, to Lake Huron, is now under construction.

Some Ocean Trade Routes of the World

(From Bartholomew's Twentieth Century Citizens' Atlas of the World)

Point of Departure	Destination	Distance in Miles	Approximate Time, in Days
Alexandria	London	2,275	6
Alexandria	Liverpool	3,027	14
Algiers	Liverpool	1,664	8
Apia (Samoa)	San Francisco	4,200	14
Bahia	Southampton	4,505	16
Bahia	Liverpool	4,430	19
Batavia	Marseilles	7,178	27
Batavia	Southampton	8,330	36
Bombay	London	6,658	25
Bombay	Liverpool	6,255	27
Bombay	Marseilles	4,924	16
Boston	Glasgow	2,785	10
Boston	Liverpool	2,932	9
Buenos Aires	Southampton	6,126	22
Buenos Aires	Liverpool	6,253	25
Calcutta	Liverpool	7,985	34
Callao	Liverpool	9,895	40
Cape Town	Southampton	6,010	19-24
Christiania	Hull	558	2
Colon	Southampton	5,252	19
Constantinople	Liverpool	3,015	10

Some Ocean Trade Routes of the World—Continued

Some Ocean Trade Routes of the World—Continued			
Point of Departure	Destination	Distance in Miles	Approximate Time, in Days
Copenhagen	Leith, Hull	616	58 hrs.
Fiji Islands	Vancouver	5,235	18
Fiji Islands	Sydney	1,725	6
Genoa	Southampton	2,134	8
Genoa	Glasgow	2,254	10
Gibraltar	London	1,299	5
Gothenburg	London	644	3
Halifax	Liverpool	2,415	7
Havana	New Orleans	585	2
Hobart	London	11,951	41
Hong-kong	Southampton	10,075	39
Hong-kong	Marseilles	8,180	30
Jamaica	Southampton	4,702	16
Lisbon	Liverpool	973	4
Lisbon	Southampton	855	3
Madagascar	Marseilles	6,077	25
Manila	Liverpool	9,575	32
Melbourne	Southampton	11,931	45
Melbourne	Marseilles	9,720	35
Montevideo	Southampton	6,170	22
Montevideo	Liverpool	6,095	25
Montreal	Liverpool	2,850	9
New Orleans	London	4,690	14
New Orleans	Liverpool	4,615	14
New York	Liverpool	3,170	6
New York	Glasgow	3,280	8
New York	Southampton	3,110	6
Odessa	Liverpool	3,335	12
Pernambuco	Liverpool	3,674	15
Portland (Me.)	Liverpool	2,770	8
Port Said	Liverpool	4,050	14
Port Said	Marseilles	1,568	5
Quebec	Liverpool	2,855	8
Rio de Janeiro	Liverpool	5,156	19
Shanghai	Southampton	10,945	43

Point of Departure	Destination	Distance in Miles	Approximate Time, in Days
Shanghai	Marseilles	9,050	36
Shanghai	Vancouver	4,300	19
Singapore	Southampton	8,638	33
Stockholm	London	1,171 and 903	4
Suez	Liverpool	3,274	10
Suez	Marseilles	1,655	6
Sydney	Southampton	12,491	49
Sydney	Marseilles	10,296	34
Valparaiso	Liverpool	8,748	37
Vera Cruz	Liverpool	5,031	20
Vladivostok	Southampton	11,748	50
Wellington	London	13,345	46
Yokohama	London	11,601	52
Zanzibar	London	6,225	40
Zanzibar	Marseilles	4,745	20
Zanzibar	Hamburg	7,130	36

Trade of Canada in 1910

COUNTRY	EXPORTS TO	IMPORTS FROM	TOTAL
British Empire.	\$165,364,091	\$112,312,760	\$277,676,851
United States..	113,150,778	239,070,549	352,221,327
Other Foreign Countries...	22,843,660	40,469,383	63,313,043

Aggregate Trade of Canada

YEAR	EXPORTS	IMPORTS	TOTAL
1905	\$203,316,872	\$266,834,417	\$470,151,289
1906	256,586,630	294,286,015	550,872,645
1907 (9 months).	205,277,197	259,786,007	465,063,204
1908	280,006,606	370,786,525	650,793,131
1909	261,512,159	309,756,608	571,268,767
1910	301,358,529	391,852,692	693,211,221

Copper, Production of

YEAR	1906	1907	1908	1909	1910
In Canada { Pounds	55,609,888	56,525,541	63,702,873	52,493,863	56,598,074
..... \$	10,720,474	11,307,369	8,413,876	6,814,754	7,209,463
In Ontario..... \$	960,813	1,045,511	1,071,140	1,127,015	1,374,103
In British Columbia..... \$	8,288,565	8,166,544		5,918,522	4,871,512

Coal, Production of

YEAR	1906	1907	1908	1909	1910
In Canada. <i>Total Tons</i>	9,762,601	10,511,426	10,886,311	10,501,475	12,796,512
In Nova Scotia..... Tons	6,220,505	6,354,133	6,652,539	5,652,089	6,407,091
In British Columbia..... Tons	2,146,262	2,364,898	2,333,708	2,606,127	3,319,168
In Alberta..... Tons	1,246,360	1,591,579	1,685,661	1,994,741	2,824,920

Cement, Production of

YEAR	1906	1907	1908	1909	1910
In Canada { Barrels	2,147,774	2,441,868	2,666,333	4,010,180	4,753,975
..... \$	3,170,859	3,781,371	3,709,878	5,266,008	6,414,315
In Ontario..... \$	2,381,014	2,777,478	2,417,769	2,897,348	3,144,343

Nickel, Production of in Ontario

YEAR	1906	1907	1908	1909	1910
Quantity..... Pounds	21,490,955	21,182,793	19,143,111	26,282,991	38,280,000
Value at mines..... \$	3,839,419	2,271,616	1,866,059	2,790,798	4,005,961

Silver, Production of

YEAR	1906	1907	1908	1909	1910
In Canada { Ounces	8,473,379	12,779,799	22,106,233	27,529,473	31,983,328
..... \$	5,659,455	8,348,659	11,686,239	14,178,504	17,106,604
In Ontario { Ounces	5,401,766	9,982,363	19,398,545	24,822,099	29,375,000
..... \$	3,607,894	6,521,178	10,254,847	12,784,126	15,711,513
In British Columbia { Ounces	2,990,262	2,745,448	2,631,389	2,649,141	2,333,842
..... \$	1,997,220	1,793,519	1,391,058	1,364,387	

Gold, Production of

YEAR	1906	1907	1908	1909	1910
In Canada. <i>Total</i> \$	11,502,120	8,382,780	9,842,105	9,882,230	10,224,910
In British Columbia..... \$	5,579,039	4,883,020	5,929,880	5,174,579	
In Yukon Territory..... \$	5,600,000	3,150,000	3,600,000	3,960,000	4,550,000

Lead, Production of

YEAR	1906	1907	1908	1909	1910
In Canada { Pounds	54,608,217	47,738,703	43,195,733	45,857,424	32,987,508
..... \$	3,089,187	2,542,086	1,814,221	1,692,139	1,237,032

Asbestos, Production of

YEAR	1906	1907	1908	1909	1910
(Nearly all from the Eastern Townships, Quebec)					
In Canada { Tons	79,410	90,426	90,773	87,300	100,385
..... \$	1,988,108	2,505,043	2,573,336	2,301,775	2,476,558

Exports of Canada to Britain

YEAR	1906	1907 (9 months)	1908	1909	1910
<i>Agricultural Products. Totals</i>	\$42,305,048	\$29,940,654	\$55,453,583	\$58,933,165	\$71,004,416
Fruits	3,755,490	2,814,803	4,598,585	2,958,689	4,503,680
Grains	32,007,337	22,228,509	43,238,332	48,227,496	51,067,498
Flour and Meal	4,173,453	2,867,826	5,502,055	5,043,559	9,961,174
<i>Animals and their Produce. Totals</i>	57,758,417	48,313,070	46,335,833	42,997,405	41,860,777
Bacon.....	11,563,619	9,012,496	10,784,920	8,206,107	6,422,747
Cheese	24,300,908	21,909,879	22,763,736	20,268,166	21,481,566
Cattle.....	11,364,434	10,448,256	8,890,915	10,280,449	10,058,912
<i>Fisheries Produce. Totals</i>	6,139,577	2,411,102	3,502,590	3,579,627	5,136,215
<i>Forest Produce. Totals</i>	12,498,738	11,783,564	11,843,094	9,845,422	11,033,074
Lumber	10,740,698	10,252,498	10,305,890	8,750,722	10,024,960
Square Timber.....	1,667,361	1,462,914	1,483,190	1,044,273	907,759
<i>Manufactures. Totals</i>	7,233,232	5,036,956	7,472,357	8,024,398	6,610,756
Leather	2,068,814	1,258,097	1,871,397	2,110,526	1,161,999
Manufactures of Wood	1,672,470	888,685	974,304	1,468,206	1,385,340
<i>Mineral Produce. Totals</i>	1,475,839	1,127,267	1,560,842	2,986,967	3,820,574

Exports of Canada to Countries other than Britain and the United States

YEAR	1906	1907 (7 months)	1908	1909	1910
<i>Agricultural Products. Totals</i>	\$5,977,325	\$3,769,081	\$7,492,667	\$8,943,798	\$11,225,081
Flour and Meal	2,480,443	1,796,268	3,598,537	3,307,480	5,510,635
Grains	1,164,154	739,945	1,689,178	3,707,402	2,724,866
<i>Animals and their Produce. Totals</i>	1,438,214	1,074,400	1,036,290	987,695	1,436,124
<i>Fisheries Produce. Totals</i>	5,005,856	4,401,665	5,546,874	5,427,916	5,899,896
Codfish	2,915,171	2,668,994	3,174,230	2,761,362	3,029,109
<i>Forest Produce. Totals</i>	3,240,392	3,294,781	4,856,622	3,400,592	4,648,633
Lumber	3,197,399	3,193,199	4,765,723	3,375,389	4,537,897
<i>Manufactures. Totals</i>	7,675,552	6,126,925	8,649,835	9,104,501	9,533,880
Agricultural Implements	2,193,622	2,175,218	2,879,371	3,151,289	3,840,813
<i>Mineral Produce. Totals</i>	1,124,788	997,576	2,396,451	3,009,870	2,777,979

Exports of Canada to the United States

YEAR	1906	1907 (9 months)	1908	1909	1910
<i>Agricultural Produce. Totals</i>	\$5,779,964	\$2,223,941	\$3,123,689	\$4,120,244	\$8,204,250
Grains	3,238,906	823,085	635,484	1,847,731	2,958,207
<i>Animals and their Produce. Totals</i>	7,259,329	6,035,029	7,729,137	7,364,546	10,629,614
Living Animals	1,629,031	1,967,913	2,053,831	1,340,783	1,805,341
Hides and Skins	3,420,204	2,543,119	3,398,545	3,844,843	5,392,776
<i>Fisheries Produce. Totals</i>	4,880,407	3,549,375	4,817,904	4,312,121	4,627,051
<i>Forest Produce. Totals</i>	23,085,040	18,397,753	27,470,754	26,421,373	31,835,326
Lumber	18,986,872	15,264,589	20,818,751	20,252,698	23,927,619
Wood for Pulp	2,649,106	1,998,805	4,655,371	4,356,391	6,076,628
<i>Manufactures. Totals</i>	9,652,328	7,924,107	12,427,258	11,828,241	15,350,280
Wood Pulp	2,419,628	2,297,448	3,545,530	3,064,879	4,175,309
<i>Mineral Produce. Totals</i>	32,869,004	24,067,112	35,219,840	31,260,862	33,488,464
Coal	3,997,467	2,918,067	4,041,562	3,493,337	3,798,623
Gold-bearing Quartz, Nuggets, etc.	12,987,542	7,226,604	8,798,720	7,289,220	5,920,376
Copper	6,611,739	4,885,311	7,579,042	6,212,597	5,685,072
Nickel	1,564,323	1,326,312	1,509,154	1,525,382	2,546,711
Silver	4,205,326	5,335,060	10,206,754	9,937,900	12,015,356
Asbestos	1,036,648	759,907	1,322,890	1,294,568	1,300,457

Imports of Canada from Britain

YEAR	1906	1907 (9 months)	1908	1909	1910
Agricultural Produce	\$2,047,760	\$1,530,415	\$2,174,709	\$2,186,840	\$2,103,366
Animals and their Produce	4,001,313	3,220,696	3,042,913	2,523,213	4,386,139
Manufactures	57,232,427	54,316,829	82,249,276	60,175,413	82,302,756

Imports of Canada from the United States

YEAR	1906	1907 (9 months)	1908	1909	1910
Agricultural Produce	\$18,606,611	\$18,889,940	\$24,543,472	\$19,890,388	21,233,419
Animals and their Produce	10,043,475	8,630,441	10,085,695	9,813,929	11,836,463
Forest Produce	6,050,611	5,800,676	10,043,265	6,204,843	8,050,772
Manufactures	100,246,392	88,541,601	116,577,079	93,723,441	131,691,421
<i>Mineral Produce. Totals</i>	23,655,116	21,142,200	34,490,499	32,735,517	34,798,366
Coal, Anthracite	10,141,350	9,405,230	14,064,434	13,886,861	14,300,004
Coal, Bituminous	8,316,150	7,409,091	14,788,845	13,011,248	12,979,151

The Leading Commercial Countries

(Based on the Statesman's Year Book, 1911, and Chisholm's Handbook of Commercial Geography)

COUNTRY	PRINCIPAL PRODUCTS	PRINCIPAL EXPORTS	TOTAL VALUE OF EXPORTS
Afghanistan	Fruits, felt, wool	Horses, fruits, grain	\$ 3,480,000
Algeria	Wine, wool, wheat, cork	Wine, wool, wheat, cork	95,000,000
Argentine Republic	Animal products, wheat	Animal products, wheat	350,000,000
Australia	Wool, gold, wheat	Gold, wool	325,000,000
Austria-Hungary	Cereals, coal, iron	Sugar, animals, animal products, coal	480,000,000
Belgium	Cereals, coal, iron	Coal, woollens, linens, iron, steel	561,000,000
Bolivia	Minerals, rubber	Silver, tin, rubber	18,248,000
Brazil	Coffee, rubber, tobacco, cocoa	Coffee, rubber, tobacco, cocoa	375,000,000
Bulgaria	Wheat, live stock	Grain, animal food, food products	19,000,000
Canada	Grain, timber, metals	Timber, cheese, wheat	375,783,000
Cape of Good Hope	Diamonds, gold, wool	Diamonds, gold, wool	232,000,000
Ceylon	Tea, cocoa, plumbago, rubber	Tea, cocoa-nut products, plumbago	50,000,000
Chile	Minerals, cereals, guano	Nitre, copper, iodine	110,000,000
China	Cereals, tea, silk	Silk, tea, cotton	220,000,000
Cho-sen	Gold, grain, ginseng	Gold, rice, ginseng	8,124,000
Colombia	Gums, coffee, precious metals	Gums, coffee, gold	15,516,000
Costa Rica	Coffee, bananas	Coffee, bananas	7,900,000
Cuba	Sugar, tobacco	Sugar, tobacco, cigars	115,637,000
Denmark	Dairy products, cereals	Provisions, animals, cereals	168,000,000
Dutch East Indies	Coffee, tea, sugar	Coffee, tea, sugar	199,800,000
Ecuador	Cacao, ivory nuts, coffee	Cacao, ivory nuts, coffee	15,000,000
Egypt	Cotton, cereals, sugar	Cotton, cereals, provisions	130,000,000
France	Cereals, wine, sugar	Textiles, yarn, wine	1,490,000,000
Germany	Cereals, coal, iron, potatoes	Textiles, hardware, chemicals	1,880,000,000
Greece	Cereals, fruits, tobacco	Currants, ores, olive-oil	20,250,000
Guatemala	Coffee, sugar, bananas, timber	Coffee, timber, hides	10,079,000
Haiti	Coffee, woods, cacao	Coffee, woods, cacao	2,275,000
Hawaii	Sugar, rice, coffee	Sugar, rice, coffee	46,000,000
India	Cereals, cotton, oil-seeds	Cotton, rice, oil-seeds	530,000,000
Italy	Silk, fruit, grain	Silk, olive-oil, sulphur	370,000,000
Jamaica	Sugar, coffee, fruit	Fruit, sugar, rum	11,000,000
Japan	Cereals, tea, silk	Silks, cotton yarn, coal	225,000,000
Madagascar	Gold, cattle, rice	Gold, cattle, raffia	6,600,000
Mexico	Metals, henequen, animals	Metals, henequen, animals	130,000,000
Morocco	Grain, eggs, almonds	Grain, eggs, almonds	10,000,000
Natal	Coal, sugar, cereals	Coal, wool, sugar	19,000,000
Netherlands	Cereals, textiles, dairy products	Cereals, hardware, textiles	1,023,000,000
Newfoundland	Fish, iron, coal	Fish, iron ore, fish oil	10,500,000
Norway	Timber, fish, animals	Timber, fish, paper	97,700,000
Orange Free State	Diamonds, coal, sheep	Diamonds, garnets, sheep	18,000,000
Panama	Fruit, coffee, rubber	Fruit, coffee, rubber	1,500,000
Paraguay	Paraguay tea, fruit, cattle	Paraguay tea, tobacco, hides	5,100,000
Persia	Fruit, cotton, opium	Fruit, cotton, opium	30,000,000
Peru	Metals, sugar, cotton	Metals, sugar, cotton	3,065,000
Philippines	Hemp, copra, sugar, tobacco	Hemp, tobacco, sugar	39,864,000
Porto Rico	Coffee, sugar, tobacco	Sugar, tobacco, coffee	37,960,000
Portugal	Wine, cereals, fruit	Wine, cork, canned fish	35,400,000
Roumania	Grain, sheep, cattle	Grain, fruit, wood	93,000,000
Russia	Grain, petroleum, fibres	Grain, raw materials, animal products	722,000,000
Salvador	Coffee, indigo, tobacco, sugar	Coffee, indigo, sugar	3,650,000
Santo Domingo	Sugar, cacao, tobacco	Sugar, cacao, tobacco	8,113,000
Servia	Grain, plums, animals	Animal products, grain, prunes	18,000,000
Siam	Rice, teak, sea products	Rice, teak, sea products	38,700,000
Spain	Grain, fruits, minerals	Wine, minerals, fruit	185,000,000
Straits Settlements	Tin, gums, pepper	Tin, gums, spices	171,600,000
Sweden	Timber, iron, grain	Timber, animals, metals	130,200,000
Switzerland	Dairy products, animals, fruits	Silk, cottons, clocks, watches	238,000,000
The Transvaal	Gold, coal, sheep	Gold, coal, wool	170,000,000
Turkey	Tobacco, cereals, fruits	Grapes, silk, wheat	68,600,000
United Kingdom	Textiles, steel manufactures	Textiles, steel manufactures	2,152,000,000
United States	Cereals, cotton, minerals	Cotton, grain, railway supplies	1,710,000,000
Uruguay	Animal products, grain	Meat, hides, grain	49,000,000
Venezuela	Coffee, cacao, animals	Coffee, cacao, hides	16,000,000
Zanzibar	Spices	Cloves	5,000,000

Their Productions, Exports, and Imports

(Based on the Statesman's Year Book, 1911, and Chisholm's Handbook of Commercial Geography)

PRINCIPAL IMPORTS	TOTAL VALUE OF IMPORTS	PRINCIPAL PORTS	COUNTRY
Cotton, indigo, sugar, tea	\$ 4,225,000	Algiers	Afghanistan.
Cottons, skins, machinery	100,000,000	Buenos Aires	Algeria.
Textiles, carriages, iron	353,000,000	Adelaide, Melbourne, Sydney	Argentine Republic.
Machinery, cottons, woollens	314,000,000	Trieste	Australia.
Wool, cotton, coal, tobacco	550,000,000	Antwerp	Austria-Hungary.
Foodstuffs, timber, wool	740,000,000	Rio de Janeiro, Bahia, Santos	Belgium.
Cottons, woollens, hardware	14,774,000	Varna	Bolivia.
Foodstuffs, cottons, coal	280,000,000	Quebec, Montreal, Halifax	Brazil.
Textiles, metals, machinery	28,000,000	Cape Town, Port Elizabeth, E. London	Bulgaria.
Steel manufactures, coal, woollens	391,852,000	Colombo	Canada.
Textiles, food products	88,946,000	Valparaiso, Iquique	Cape of Good Hope.
Grain, coal, cottons	45,000,000	Shanghai, Canton	Ceylon.
Textiles, minerals, oils, machinery	98,000,000	Chemulpo	Chile.
Cottons, opium, rice	272,000,000	Barranquilla, Cartagena	China.
Cottons, silks, oil	18,324,000	Puerto Limon	Cho-sen.
Flour, salt, petroleum	10,561,000	Havana, Santiago de Cuba	Colombia.
Foodstuffs, dry goods, hardware	5,900,000	Copenhagen	Costa Rica.
Textiles, rice, food products	98,239,000	Batavia, Surabaya	Cuba.
Provisions, textiles, hardware	201,300,000	Guayaquil	Denmark.
Cottons, manure, hardware	116,000,000	Alexandria, Port Said	Dutch East Indies.
Cottons, woollens, hardware	9,300,000	Marseilles, Le Havre, Bordeaux	Ecuador.
Cottons, coal, wood	111,000,000	Hamburg, Bremen, Stettin	Egypt.
Wool, raw silk, coal	1,570,000,000	Piræus, Patras	France.
Provisions, raw materials, oil	2,150,000,000	San José, Puerto Barrios	Germany.
Cereals, yarns, coal	27,600,000	Port au Prince	Greece.
Cottons, provisions, beverages	5,251,000	Honolulu	Guatemala.
Cottons, sacks, hardware	4,606,000	Calcutta, Bombay, Rangoon	Haiti.
Manufactured goods, foodstuffs	25,137,000	Venice, Genoa, Leghorn	Hawaii.
Cottons, hardware, sugar	505,000,000	Kingston, Port Antonio	India.
Grain, cotton, coal	620,000,000	Yokohama, Nagasaki	Italy.
Cottons, fish, flour	12,000,000	Tamatave	Jamaica.
Cottons, sugar, hardware	230,000,000	Vera Cruz, Tampico	Japan.
Cottons, rice, wine	6,800,000	Tangier	Madagascar.
Hardware, textiles, coal	97,000,000	Durban	Mexico.
Cottons, sugar, tea	18,800,000	Rotterdam, Amsterdam	Morocco.
Hardware, dry goods, provisions	39,000,000	St. John's	Natal.
Cereals, iron, textiles	1,307,000,000	Christiania, Bergen, Trondhjem	Netherlands.
Flour, textiles, provisions	11,500,000	Panama, Colon	Newfoundland.
Provisions, metals, textiles	101,600,000	Bushire	Norway.
Dry goods, food, hardware	23,000,000	Callao	Orange River Colony.
Cottons, flour, provisions	8,700,000	Manila	Panama.
Textiles, hardware	3,750,000	Ponce, San Juan, Mayaguez	Paraguay.
Cottons, sugar, woollens	40,000,000	Oporto, Lisbon	Persia.
Breadstuffs, hardware, cottons	2,175,000	Galatz	Peru.
Rice, flour, wine	37,067,000	St. Petersburg, Odessa	Philippines.
Cottons	30,635,000	Acajutla, Libertad	Porto Rico.
Cottons, coal, codfish	74,000,000	Puerto Plata, Samana	Portugal.
Textiles, metals, hides	73,000,000	Bangkok	Roumania.
Raw materials, manufactures	416,000,000	Barcelona, Cartagena, Malaga	Russia.
Cottons, breadstuffs, woollens	3,745,000	Singapore	Salvador.
Cottons, hardware, provisions	4,425,000	Gothenburg, Stockholm	Santo Domingo.
Cottons, metals, woollens	14,200,000	Constantinople	Servia.
Cottons, sacks, opium	26,000,000	London, Liverpool, Glasgow	Siam.
Grain, cotton, timber	190,000,000	New York, Boston, New Orleans	Spain.
Rice, cottons, opium	191,200,000	Montevideo	Straits Settlements.
Coal, metal goods, yarns	169,800,000	La Guaira, Puerto Cabello, Maracaibo	Sweden.
Foodstuffs, silk, metals	340,000,000	Zanzibar	Switzerland.
Hardware, clothing, provisions	95,000,000		The Transvaal.
Cottons, sugar, coffee	126,000,000		Turkey.
Breadstuffs, meat, cotton	3,392,000,000		United Kingdom.
Sugar, chemicals, coffee	1,556,000,000		United States.
Food, machinery, textiles	40,000,000		Uruguay.
Textiles, hardware, provisions	10,000,000		Venezuela.
Textiles, coal	4,900,000		Zanzibar.

SELECTED LIST OF GEOGRAPHICAL NAMES

KEY TO PRONUNCIATION

ā as *a* in *ale*.
 ā " *a* " *am, carry*.
 ah " *a* " *arm, ear*.
 aw " *a* " *all*.
 ē " *e* " *eve*.
 é " *e* " *end*.

i as *i* in *ice*.
 ī " *i* " *ill*.
 ó " *o* " *old*.
 ô " *o* " *odd*.
 u " *u* " *use*.

u as *u* in *up*.
 ōō " *oo* " *food*.
 ōō " *oo* " *foot*.
 ow " *ow* " *cow*.

ch as *ch* in *chair*.
 g " *g* " *go*.
 ng " *ng* " *sing*.
 zh " *z* " *azure*.

NAME	PRONUNCIATION
Aar	ahr.
Abitibi	ah-bē-tib'-bē.
Abyssinia	ab-is-sin'-e-a.
Acapulco	ah-kah-pool'-ko.
Acum	ah-kah-ré'.
Achill	ak'-il.
Aconagua	ah-kōu-kah'-gwah.
Adelaide	ad'-e-lād.
Aden	ā'-den.
Adige	ād'-ē-jā (ah'-de-jā).
Adirondack	ād-i-ron'-dak.
Adrianople	ād-rē-ān-ō'-p'l (ād-rē-a-nō'-pl).
Adriatic	ād-re āt-ik (ā-dri-at'-ik).
Ægean	ē-jē'-an.
Afghanistan	ahf'-gahn-is-tahn'.
Agassiz	āg'-as-sē.
Aix-la-Chapelle	āks-lah shah-pél'.
Ajaccio	ah-yaht'-cho.
Alabama	āl-ā-bah'-ma.
Alaska	ah-las'-kah.
Albany	awl'-bā-nē.
Alberni	āl-ber'-nē.
Alberta	āl-ber'-ta.
Albuquerque	ahl'-boo-kar'-ka.
Aleutian	ah-lu'-shan.
Alexandria	āl-egs-an'-dri-ah (āl-eks).
Algiers	āl-jeerz'.
Allegheny	āl'-le-gā-nē.
Allumette	ahl-lū-met'.
Alma	āl'-mā.
Alsace	ahl-sahs'.
Altai	ahl-tī'.
Amazon	ām'-ā-zōn.
Amiens	am'-i-enz.
Amsterdam	ām'-ster-dām.
Amur	ah-moor'.
Andes	ān'-dēz.
Andorra	an-dōr'-ra.
Angers	ahn-zhā'.
Anglesey	ang'-g'l-sē.
Annapolis	ān-nāp-ō-lis.
Antarctic	ant-ark'-tik.
Anticosti	an-ti-kos'-tī.
Antigonish	ant'-ig-o-nish.
Antigua	ahn-tē'-gwah.
Antilles	ahn-tīl'-lēz.
Appalachian	ap-pa-lā'-chī-an (ap-pa-lāch'-i-an).
Apennines	āp'-en-nīnz.
Apure	ah-pōōr'-ra.
Aral	ār'-al (ahr-al).
Ararat	ār'-ā-rat.
Archipelago	ahr-kī-pel'-ā-gō.
Ardennes	ahr-dēn'.
Arequipa	ah-rā-kee'-pah.

NAME	PRONUNCIATION
Argenteuil	ahr-zhōn-tū'y'.
Argentina	ahr-jēn-tee'-na.
Argyle	ahr-gīl'.
Arica	ah-ré'-kah.
Arichat	ar'-ī-shat.
Arizona	ar-i-zō'-na.
Arkansas	ahr'-kan-saw.
Armagh	ahr-mah'.
Aroostook	ā-roōs'-toōk.
Ashtabula	āsh'-ta-bū'-la.
Asia	ā'-she-a.
Assiniboia	as-sin-i-boi'-a.
Assiniboine	as-sin'-i-boin.
Assuan	ahs-swahn'.
Astrakan	ās'-tra-kān'.
Asuncion	a-sōōn'-se-on.
Atacama	ah-ta-kah'-ma.
Athabaska	āth-ā-bās'-kā.
Athens	āth'-ēnz.
Atlas	āt'-las.
Australia	aws-trū'-lī-a.
Austria	aws'-trī-a.
Auvergne	ō'-ver'-nye.
Avon	āv'-ūn.
Aylmer	āl'-mūr.
Ayr	air.
Azores	ah-zorz'.
Azov	ā'-zov (ah-zov').
Baden	bah'-den.
Bagot	bah-gō'.
Bahama	bah-hā'-mah.
Bahia	bah-e'-ah.
Baikal	bī'-kahl.
Baku	ba-kōō'.
Balearic	bāl-e-ār'-ik.
Balkan	bahl-kahn'.
Baltimore	bawl'-tī-mōre.
Baluchistan	bā-loo'-chis-tahn'.
Banff	bamf.
Bangkok	ban-kōk'.
Barbados	bahr-bā'-dōz.
Barcelona	bahr-sē-lō'-nah.
Barranquilla	bahr'-ran-kēl'-ya.
Basel	bah'-zēl.
Batavia	ba-tā'-vī-a.
Baton Rouge	bat'-un-roōzh.
Batum	bah-toōm'.
Beauce	bōce.
Beauharnois	bō-hahr-nwa(h').
Bechuanaland	hetch-ōō-ah'-nā-land.
Bedeque	bē-dēk'.
Beirut	bā-root.
Bering	bē'-ring.

NAME	PRONUNCIATION	NAME	PRONUNCIATION
Belfast	bél-fast'.	Caribbean	kār-ib-bé'-an.
Belgrade	bél-grád'.	Carillon	kah-reel-yon'.
Belize	bé-leez'.	Carmarthen	kahr-mahr'-then.
Bellechasse	bél-shahs.	Carolina	kār-ō-lin'-ā.
Belle-Isle	bél-ile'.	Carpathian	kahr-pā'-thi-an.
Belleville	bél' vil.	Cassiar	kas'-si-ahr.
Benares	ben-ah'-rēz.	Cassiquiari	kah-sē kē-ah'-rē.
Bengal	ben gawl'.	Catoche	kah-tō'-che.
Benin	ben én'.	Caucasus	kaw'-kah-sūs.
Ben Nevis	ben-név'-is.	Caughnawaga	kaw-nah-waw'-gah.
Bergen	bér-gén.	Causses	kös.
Berlin	bér-lin'.	Cavan	kāv'-án.
Bermudas	bér-mā'-déz.	Cayenne	kā-én' (ki-én').
Berne	bérn.	Celebes	sél'-é-béz.
Berthier	bér-te-ā.	Cenis	séh-né'.
Bhutan	bōō tahn'.	Cettinje	set-tén'-yā.
Biafra	be-af'-ra.	Ceuta	sū'-tā.
Biarritz	be-arr-rétz.	Cevennes	sā-vènn'.
Birmingham	ber'-mīng-am.	Ceylon	sē-lōn' (sīl-on').
Biscay	bis'-ka.	Chad	chahd.
Blanc (Mont)	blāng-blong.	Chaleur	shah-loor'.
Blenheim	blén'-im.	Chambly	shahm'-blē.
Bloemfontein	bloōm'-fōn-tīn'.	Champlain	shām-plānē'.
Bluefields	blū'-fēldz'.	Charlévoix	shahr-lé-voi' (vwa).
Bogotá	bō gō'-tah.	Charlo	shahr'lō.
Bohemia	bō-hē'-mīa.	Chateauguay	shah-tō-gā'.
Bokhara	bō-kah'-rah.	Chatham	chāt'-am.
Bolivia	bō-liv'-ī-ā.	Cherbourg	sher-boorg.
Bologna	bō-lōn'-ya.	Cherra Punji	chér-rah-poon'-jē.
Bonaventure	bōn-a-vènt'-cher.	Chesapeake	ches'-ā-pēk.
Bonifacio	bō-nē-fah't'-cho.	Cheshire	chēsh'-ir.
Bordeaux	bōr-dō'.	Cheviot	chév'-ē-ūt.
Borneo	bōr'-nē-ō.	Cheyenne	shī-enn'.
Bosporus	bōs'-pō-rūs.	Chicago	shī-kaw'-go.
Boulogne	boo-lōnē'.	Chicoutimi	she-koo'-tē-mē.
Bourbon	boor'-būn.	Chidley	chid'le.
Brahmaputra	brah-mā-poo'-trā.	Chignecto	shig-nēk'tō.
Braich y Pwll	brī'-ke-pool.	Chili	chīl'-lē.
Bras d'Or	brah-dōr'.	Chilkat	chīl'-kat.
Brazil	brā zil'.	Chilliack	chīl'-lē-wāk.
Brazos	brah'zōs.	Chiltern	chīl'-tern.
Bremen	brēm'-en.	Chimborazo	chim-bō-rah'-zō.
Breslau	brēs'-lou.	Christiania	kris-tē-ah'-nē-ah.
Breton	brīt'-un (brēt-ūn).	Cienfuegos	sē-én-fwā'-gōce.
Brindisi	brēn'-dē-sē.	Cincinnati	sin-sin-nah'-te.
Britain	brīt' t'n.	Ciudad Rodrigo	the-ōō-dad' rod-rē-gū.
Buchan Ness	būk'-an-ness.	Coaticook	kō-at'-i-kook.
Budapest	boo'-da-pest.	Cobequid	kōb'ē'-kwid.
Buenos Aires	bō-nūs-ā'-riz.	Cobourg	kō'-bürg.
Bukarest	bū ka-rest'.	Cochin	kō'-chin.
Bukhara	bō-kah'-ra.	Cologne	kō-lōnē'.
Burma	bur'-ma.	Colon	kō-lōnē'.
Butte	būte.	Colorado	kōl-o-rah'-dō.
Cacouna	kah koo-nah'.	Connecticut	kōn-net'-i-kūt.
Cadiz	kā'-diz.	Constantinople	kōn-stan-tī-nō'-p'l.
Caicos	ki'-kōs.	Copenhagen	kō-pen-hā'-gen.
Cairo	ki' rō.	Cordova	kōr'-dō-vah.
Calais	kal'-is (kah-lā').	Corinth	kōr'-inth.
Calcutta	kāl'-kut'-ta.	Corrientes	kōr-rē-en'-tēs.
Calgary	kāl'-gah'-rē.	Corsica	kōr'-si-kah.
Callao	kahl-lah'-o.	Cotopaxi	kō-tō-pak'-sē.
Calumet	kāl'-u-met.	Cowichan	kow'-itch-an.
Cambrian	kām'-brī-en.	Crimea	krīm'-ē'a.
Cambridge	kām'-bridge.	Cromarty	króm'-er-tē.
Campbellton	kām'-el-tun.	Curaçao	kū-rā-sah'-o.
Campeche	kahm-pé'-che.	Cuzco	koōs'-ko.
Canaan	kā'-nān.	Cyclades	sīk'-lah-déz.
Canso	kān'-sō.	Dahomey	dah-hō'mi.
Canton	kān-ton'.	Dakota	dā-kō'-tā.
Caracas	kah-rah'-kahs.	Dalhousie	dāl-hōō'-zē.
Caracuet	kah-rah-ket'.	Danube	dān'-ūb.
Cardiff	kahr'-dīff.	Danzig	dant'-zig (dān'tsēch).

NAME	PRONUNCIATION
Dardanelles	dahr-dā-nélz'.
Darien	dā-rē-én'.
Delaware	dél'-ah-ware.
Delhi	del'i (dél'-hi).
Deloraine	dél-o-rān'.
Demerara	dém-ér-ah'-rá.
Deseronto	dés-ér-ón'-tō.
Des Moines	dé-moin'.
Detroit	dé-troit'.
Devon	dév'-on.
Dieppe	dē-ep'p'.
Dijon	dé-zhōn'.
Dnieper	né'-per.
Dniester	né'-ster.
Dominica	dóm-i-nee-kah.
Dovre-fjeld	dō-vré-fe-eld'.
Drave	drāve (drah'-veh).
Drogheda	droh'-he-dah.
Duluth	du loōth'.
Dumfries	dūm-freece'.
Dundas	dūn-dās'.
Dunedin	dūn-ē'-din.
Dvina	dve'nah.
Dyea	di-ē'-ah.
Earn	urn.
Ebro	ē'-brō.
Ecuador	ék-wah-dōr'.
Edinburgh	éd'-in-būr-roo (éd'-in-būrg).
Egypt	ē'-jipt.
Elbe	ēlb.
Eleuthera	ē-lū'-thér-ah.
Elgin	ēl'-gin.
Ellice	ēl'-lis.
El Paso	ēl-pah'-sō.
England	ing'-gland.
Erebus	ēr'-ē-būs.
Erie	ē'-rē.
Erzgebirge	érts-gē-bēr'-gē.
Escuminac	ēs-kū'-min-ak.
Esquimalt	ēs-kwī'-malt.
Essequibo	ēs-seh-kwee'-bō'.
Etchemin	ēt'-ché-min.
Etna	ēt-nah.
Euboea	ū-be'-ah.
Euphrates	ū-frū'-tēz.
Europe	ū'-rūp.
Everest	év'-ér-ést.
Eyre	air.
Falkland	fawk'-land.
Falmouth	fāl'-mouth.
Fermanagh	fūr-man'-ah.
Fiji	fē-jē.
Florence	flōr'-ence.
Florida	flōr'-i-dah.
Fredericton	fred'-er-ik-tūn.
Foochow	foō'-chow.
Funchal	foōn-shahl'.
Fundy	fūn'-di.
Funen	foō'-nen.
Fuji-yama	foo-jē-yā r'-mah.
Gabarus	gah-ba-roos'.
Gaeta	gah-ā'-tah.
Galapagos	gāl-a-pā'-gōs.
Galicía	gah-lish'-i-ah.
Gallinas	gal-lē'-nas.
Galway	gawl'-way.
Gananoque	gan-an-ō'-kwe.
Ganges	gan'-jēz.
Garonne	gah-rōn'.
Gaspé	gas'-pé (gahs-pā').

NAME	PRONUNCIATION
Gatineau	gah-tē-nō'.
Gebirge	gē-bēr-gē.
Genoa	jen'-ō-ah.
Ghent	gént.
Ghizeh	gē'-zēh.
Gibraltar	jī-brawl'-ter.
Gironde	jī-rond'.
Glacé	glāce.
Glasgow	glas'-gō (glas'-kō).
Gleichen	gli'-ken.
Gloucester	glōs'-ter.
Gobi	gō'-bē.
Godavery	gō-dah'-ve-re.
Goderich	gōd'-rich.
Gothard	gōth'-ahrd.
Gothenburg	gōt'-en-būrg.
Gracias-a-Dios	grah'-sē-ahs-ah-dē-ōce'.
Granada	grah-nah'-dah.
Greenock	green'ock (gren'-uk).
Greenwich	grin'-ij (grēn'-ij).
Grenada	grēn-ā'-dah.
Guadalajara	gwah-dahl ah-hah'-ra.
Guadalquivir	gwah-dahl kwiv'-er.
Guadeloupe	gah-dē-loop'.
Guam	gwahm.
Guardafui	gwahr'-dā-fē.
Guatemala	gaw-tē-mah'-la.
Guayaquil	gwī-a-kel'.
Guayra	gwī'-rah.
Guelph	gwēlf.
Guernsey	gurn'-zē.
Guiana	gē-ah'-nah.
Haarlem	hahr'-lēm.
Hague	hāg.
Hainan	hī-nahn'.
Haiti	hā'-ti.
Halle	hahl'-leh.
Hanoi	hah-noi'.
Havana	hah-vān'-ah.
Haverhill	hā'-vēr-il.
Havre	ahvr.
Hawaii	hah-wī'-ē.
Hebrides	hēb'-i-dēz.
Hecate	hek'-ā-tē.
Heidelberg	hī'-del-būrg.
Helena	hel'-nah.
Herat	hé-raht'.
Herzegovina	hert'-sē-gō-vē'-nah.
Himalaya	hī-mah'-la-yah (hīm-ā-lē'-yā).
Hindo Koosh	hin'-doo koōsh'.
Hobart	hō'-bert.
Hochelaga	hōsh-ē-lah'-gah.
Honduras	hon-dū'-ras.
Honolulu	hō-nō-loo'-loo.
Hoogly	hōō'-glē.
Houston	hus'-tun.
Howth	hōth.
Hyderabad	hi-dūr-ah-bad'.
Iberville	ē-bār-vēl'.
Idaho	i-da-ho.
Illecillewaet	il-lē-sil'-lē-wet.
Ilimani	il-ye-mah'-nē.
Illinois	il-lī-oi'.
Indiana	in-de-ān'-ah.
Indianapolis	in-de-an-ap'-ō-lis.
Indus	in' dūs.
Inverness	in-vēr-ness'.
Iona	i-ō'-nah (ē-ō'-nah).
Iowa	i'-o-wah.
Iquique	ē-kē'-kā.
Irak Arabi	ē-rak' ahr'-a-be.

NAME	PRONUNCIATION	NAME	PRONUNCIATION
Iran	ērahn'.	Leipzig	lip'-sik.
Irawadi	īr'-ah-wah'-dī.	Lepreau	lē-prō'.
Ireland	īr-land.	Letite	lē-tēt'.
Irkutsk	īr-koōtsk'.	Levant	lē-vānt'.
Iser	ē'-zer.	Levis	lē've.
Islay	ī'-lā.	Leyden	lī'-dēn.
Ismailia	ēs-mah-ē'-lē-ah.	Lhasa	lhah'-sah'.
Itasca	ī-tas'-kah.	Liège	lē-āzh'.
Iviča	ē-vē'-sah.	Lille	lēl.
Ixtaccihuatl	ēs-tak-sé'hwatl.	Lillooet	lil'loo-ēt.
Jacques Cartier	zhāk-kahr-tē-ā'.	Lima	lē'mah.
Jacquet	jak'-ēt.	Limoges	lē-mozh'.
Jamaica	jāh-mā'-kah.	Lincoln	link'-ūn.
Java	jah'-vah.	Lipari	lip'-ah-rē.
Jedo	ye'-dō.	Lisbon	liz'-būn.
Jena	yā'-nah.	L'Islet	lē-lā'.
Jerusalem	jē-rū'-sā-lem.	Listowel	lis-tō'-ēl.
Johannesburg	yō-hahn'-nes-burg.	Llanelly	lah-neth'-le.
Joliet	jō'-li-ēt.	Llanos	lah'-nōz.
Juan de Fuca	jū-an-dē-fū'-ka (wan-dā-foo'-ka).	Loch Linnhe	lōk-lin'-nē.
Juneau	jū-nō'.	Lofoten	lō-fō'-ten.
Jungfrau	yōōng'-frow.	Loire	lwahr.
Kābul	kah-bool'.	Longueuil	long-gale' (lon-gā'y).
Kamchatka	kahm-chāt'-kah.	L'Orignal	lō-reen-yahl'.
Kamouraska	kah-moo-rah's'-ka.	Los Angeles	lōs ang'-gēl-ēs (lōs an'-jel-ēs).
Karachi	kū-rah'-che.	Lotbinière	lōt-bē-nī-ār'.
Karakorum	kah-rah-kō'-rum.	Louisburg	loo'-is-būrg.
Karoo	kah-rōō'.	Louisiana	loo ē-zē-ah'-nah.
Kaslo	kaz'-lō.	Lourenço Marques	lō-ren'-sō mahr'-kēs.
Kassala	kahs-sah'-lah.	Louth	lowth.
Katahdin	kah-tah'-din.	Lucknow	lūk'-now.
Katrine	kāt'-rin.	Luzon	loo'-zōn'.
Keewatin	kē-wah'-tin.	Lyons	lī'-unz.
Kelat	ke-laht'.	Macao	mah-kah'-o.
Kennebecasis	kēn-nē-bēk-ā'-sis.	Macon	mā'-kūn.
Kenora	kē-nō'-rā.	Madagascar	mad-ah-gās'-kahr.
Khartoum	kahr-toom'.	Madame	mah-dahm'.
Khiva	kē'-vah.	Madawaska	mad-ah-wōs'-kah.
Khyber	kī'-būr.	Madeira	mah-dē'-ra.
Kiel	keel.	Madras	mah-drās'.
Kiev	kē'-ev.	Madrid	mah-drid'.
Kilimanjaro	kil-e-mahn-jah'-rō.	Mafeking	mah-fē-king'.
Kincardine	kin-kahr'-din.	Magaguadavic	māk-ā-dā'-vē.
Kirkcudbright	kīr-koō'-brē.	Magdalen	māg'-dā-lēn.
Kjölen	ky-ōō'-lén.	Magellan	mah-jel'-lan.
Kootenay	koō'-ten-ā.	Maggiore	mahd-jō'-rā.
Korea	kō-rē'-ah.	Magog	mā'-gōg.
Kuen Luen	kwen-loōn'.	Malacca	mah-lak'-ka.
Kurile	koō'-ril.	Malaga	mah-lah-gah.
Kuro Shiwo	kōō-rō-shē'-wō.	Malay	mah-lā'.
Kyoto	kē-ō'-tō.	Manan	man-ān'.
La Beauce	lah-bōce'.	Manitoba	man-i-tō'-bah.
Labelle	lah-bél'.	Manitoulin	man-i-too'-lin.
Labrador	lāb'-rā-dōr.	Maracaibo	mah-rah-kī'-bō.
Labuan	lah-boō-ahn'.	Marmora	mahr'-mō-rā.
Laccadive	lak'-kah-dive.	Marquesas	mahr-kā'-sahs.
Lachine	lah-shēn'.	Marseilles	mahr-sālz'.
Ladoga	lah-dō'-gah.	Martinique	mahr-tī-nēk'.
Ladrones	lah-drōnz'.	Mascareen	mās-ka-rēn'.
La Guayra	lah-gwi'-rah.	Maskinonge	mās-kē-nōnj'.
Lahave	lah-hāv'.	Massachusetts	mās-sā-chū'-sēta.
Lanark	lān'-ark.	Massowa	mahs-so-w'-ah.
La Paz	lah-pahz'.	Matamoros	mat-a-mō'-ros.
La Plata	lah-plah'-tah.	Matanzas	mah-tān'-zās.
La Prairie	lah-prā'-rē.	Matapedia	māt-ah-pē'-dī-ah.
L'Assomption	lahs-sōn-se-on'.	Mattawamkeag	mat-ta-wōm'-kēg.
Laurentian	law-rēn'-shi-an.	Maugerville	mā'-jēr-vīl.
Lausanne	lō-zahn'.	Mauna Kea	mou'nah-kā'ah.
Laval	lah-vahl'.	Mauritius	maw-rish'-y-us.
Lebanon	lēb'-ā-nun.	Mecca	mēk'-ka.
		Medina	mā-dē'-nah.
		Megantic	mē-gān'-tik.

NAME	PRONUNCIATION
Melbourne	mél'búrn.
Memphremagog ..	mém-fré-mă'-gog.
Menai	mén-i.
Mendocino	mên-dô-sé'-nô.
Mer de Glace	mür-dé-glâs'.
Merthyr Tydvil ..	mür-thür tid'-vil.
Messina	més-sé'-nah.
Meteghan	mët-ä'-gân.
Meuse	müz.
Michigan	mish'-i gân.
Michipicoten	mish-i pi-kô'tén.
Milan	míl-an (mil-an').
Milwaukee	míl-waw'-ké.
Minas	mí'nas.
Mindanao	men-da-nah'-o.
Minneapolis	mín-né ap'-ô-lis.
Minnesota	min-né sô'-ta.
Minorea	min-or'-ka.
Miquelon	mik-é-lon'.
Miramichi	mír-a-mé-shé'.
Miscou	mis'-koó.
Missisquoi	mis-sis'-kwoi.
Mississippi	mis-is-sip'-pé.
Missouri	mis-soo'-ré.
Mitylene	mit-i-lé'-né.
Mobile	mô-bel'.
Mocha	mó'-kah.
Mohave	mo-hah'-va.
Moluccas	mô-luk'-kaz.
Mombasa	móm-bah'-sah.
Monaco	môn'-ah-kô.
Monaghan	môn'-ä-han.
Montague	môn'-tä-gü.
Montana	môn-tah'-nah.
Montauk	môn-tawk'.
Montcalm	mónt kahm'.
Montenegro	mon-ta-nä'-grô.
Montevideo	mon-té-ä id'-é-o.
Montmagny	mon-mahn-yé'.
Morocco	mô-rök'-kô.
Moscow	môs'-kô.
Mozambique	mô-zâm-bek'.
Mukden	môök'-den.
Munich	mü'-nik.
Muskoka	müs'-kô'-kah.
Musquash	müs'-kwosh.
Musquodoboit	müsk-ô-dôb'-it.
Nagasaki	nah-gä-sah'-ké.
Nakusp	na-küsp'.
Nanaimo	nan-i'-mô.
Nantes	nänts.
Napanee	nap'-ä-né.
Nashwaak	näsh'-wawk.
Nassau	nas'-saw.
Natal	nä-tahl'.
Nechako	né-chak'-o.
Nepal	né-pawl'.
Nevada	né-vah'-dah.
Newfoundland	nü-fünd-land'.
New Orleans	nü-ör'-lé-anz.
New Zealand	nü-zé'-land.
Niagara	nî-äg'-ä-rä.
Nicaragua	nik-ah-rah'-gwah.
Nice	nés.
Nicobar	nik-o-bahr'.
Nicolet	nik-o-lä'.
Niger	nî'-jér.
Nîmes	nêm.
Nippon	nî-fon'.
Nipigon	nîp'-i-gon.
Nipissing	nîp'-is-sing.
Nizhniy-Novgorod ..	nyez'-nye-nov'-go-rot.

NAME	PRONUNCIATION
Norwich	nor'-rij (nor'-ritch).
Nottawasaga	nôt-tä-wa-saw'-gä.
Nova Scotia	nô'-vâ-skô'-shä.
Nova Zembla	nô'-vâ-zém'-blä.
Nyanza	nē-ahn'-zah.
Nyassa	nē-ahs'-sah.
Oahu	ô-ah'-hoo.
Ob-Irtysh	ob-ir'-tish.
Obi	ô'-bē.
Oceania	ô-shē-ah'-nī-a.
Oder	ô-der.
Odessa	ô-des'-sa.
Oesel	û'-sel.
Ohio	ô-hi'-ô.
Okanagan	ô-kan-ah'-gân.
Okhotsk	ô-kôtsk'.
Oklahoma	ôk-lah-hô'-mah.
Omaha	ô'-mah-haw.
Onega	ô-né'-ga.
Ontario	ôn-tä'-ri-ô.
Oregon	ôr'-e-gon.
Orillia	ô-ril'-li-ah.
Orinoco	ô-rin-ô'-kô.
Orleans	or'-lé anz.
Oromocto	or-ô-mük'-to.
Orontes	ô-rôn'-téz.
Ottawa	ot'-tah-wah.
Ouse	ôöz.
Pacific	pah-sif'-ik.
Padua	päd'-ü-a.
Palermo	pä-lér'-mô.
Palk	pawk.
Pamir	pah-mér'.
Panama	pan-a-mah'.
Papua	pap'-oo-a.
Para	pah-rah'.
Paraguay	pah-ra-gwä'.
Paramaribo	pär-a-mär'-i-bô.
Parana	pah-rah'-nah (nah).
Paria	pah'-re-ah.
Passamaquoddy	pas-sä-mä'-kwod'-dy.
Passaro	pahs-sah'-rô.
Patagonia	pät-ä-gô'-nī-a.
Pechili	pä-ché-lé'.
Pei-Ho	pä-hô'.
Peking	pē-kin'.
Pembina	pēm'-bē-na.
Pennine	pen'-nīn.
Pennsylvania	pen-sil-vä'-nī-a.
Penobscot	pen-ôb'-skôt.
Pensacola	pen-sah-kô'-la.
Peoria	pē-ô'-rī-ah.
Perekop	pä-rä-kop'.
Pernambuco	pér-nâm-bôô'-kô.
Persia	per'-shä (per'-zhä).
Peru	pē-roo'.
Petitcodiac	pet'-ô-kô-dé-ak'.
Philadelphia	fil-ä-del'-fe-a.
Philippine	fil'-ip-pin.
Pico	pē'-kô.
Pictou	pik'-tô.
Pisa	pē'-zah.
Plymouth	plim'-üth.
Pomona	pô-mô'-na.
Pompeii	pom-pä'-yē.
Pontiac	pôn'te-ak.
Popocatepetl	pô-pô-kah-tä'-pēt'l.
Portage la Prairie ..	pôr-tazh' lah prä'-rē.
Portneuf	pört-nüf'.
Porto Rico	pôr'-tô ré'-kô.
Portugal	pôr'-tū-gal.

NAME	PRONUNCIATION	NAME	PRONUNCIATION
Potomac	pō-tō'-mak.	Salisbury	sawlz'-bēr-e.
Potosi	pō-tō-sé', or po-tō'se.	Salonica	sah-lō-nē'-kē.
Prague	prāg.	Samoa	sah-mō'-ā.
Pretoria	prē-tō'-re-ah.	Samothraki	sah-mō-thrah'-kē.
Prussia	prush'-ā.	San Blas	sahn blahs'.
Pueblo	pwéb'-lō.	San Diego	sahn dē-ā'-go.
Punta Arenas	poon'-tah ah-rā'-nabs.	San Francisco	sahn frān-sis'-ko.
Putumayo	poo-too-mī'-ō.	San Jose	sahn hō-sā'.
Pyrenees	pīr'-ē-nēz.	San Juan	sahn hoo-ahn'.
Quaco	kwaw'-kō.	Santa Fe	sahn'-tah fā'.
Qu'Appelle	kāp pēl'.	Santiago	sahn-tē-ah'-go.
Quebec	kwe'-bék'.	Saone	sōn.
Quesnel	ken'-nel.	Saskatchewan	sās-katch'-ē-wōn.
Quinte	kwin'-te.	Saskatoon	sās-kā-toon'.
Quito	kē'-to.	Sault Ste. Marie	sōo sānt mā'-rē.
Racine	rah-sēn'.	Savannah	sah-vān'-nah.
Raleigh	raw'-lē.	Scatari	skat-ā-rē'.
Rangoon	rahn-goōn'.	Scheldt	skélt.
Rappahannock	rap-pah-han'-nūk.	Schenectady	skē-nék'-ta-dē.
Reading	réd'-ing.	Schleswig-Holstein	shlāz'-vig hōl'-stēn.
Reggio	réd'-jō.	Schoodic	skoo'-dik.
Reikjavik	rī'-kyah-vek.	Schuykill	skōōl'-kil.
Reims	rēmz.	Scilly	sil'-lē.
Renous	rē-nōōs'.	Scutari	skoo'-tah-rē.
Restigouche	rēs-tī-goōsh'.	Sedan	sē-dān'.
Rhodes	rōdz.	Seine	sān.
Richelieu	rē-shē-loo'.	Senegal	sen-ē-gawl'.
Richibucto	rish-ī-būk'-to.	Seville	sē-vil' (sev'-il).
Rideau	rē-dō'.	Seychelles	sā-shēl'.
Riga	rē'-gah.	Shanghai	shang-hī'.
Rimouski	rē-moōs'-kē.	Shawenegan	shah-wēn-ē-gān'.
Rio Grande	rē'-o grahn'-dā.	Shediac	shēd-e-ak'.
Rio Janeiro	rē'-o zhah-nā'-ro.	Shemogue	shem-ō-gwē'.
Rio Negro	rē'-o nā'-grō.	Shenandoah	shen-an-dō'-ah.
Ripon	rip'-ūn.	Shepody	shēp'-ō-dē.
Riviera	rē-vē-ā'-rah.	Shippigan	ship-pē-gān'.
Rivière du Loup	rē-ve-ār' doo-loo'.	Shubenacadie	shōō-ben-āk'-ā-dē.
Roanoke	rō-ā-nōk'.	Shuswap	shūs'-wap.
Rochdale	rōtch'-dāle.	Siam	sī-am' (sē-am').
Rochefort	rōsh-for'.	Sicamous	sik'-ā-moos.
Rochelle	rō-shēl'.	Sicily	sis'-ī-lē.
Rochester	rōtch'-ēs-tēr.	Sierra Leone	se-ēr'-rah lē-o'-ne.
Rosario	rō-sah'-rē-o.	Sierra Madre	se-ēr'-rah mah'-drā.
Rossignol	rōs-sēn-yōl'.	Sierra Morena	se-ēr'-rah mō-rā'-nah.
Rothsay	rōth'-sā.	Sierra Nevada	se-ēr'-rah ne-vah'-dah.
Rouen	roo'-ēn.	Silesia	sī-lē'-shī-a.
Roumania	roo-mā'-nī-a.	Sinai	sī'-nā (sī'-nī).
Russia	rūsh'-a.	Singapore	sing-gā-pōr'.
Saale	zah'-leh.	Sioux	sōō.
Saco	saw'-kō.	Skager Rack	skag'-er rak'.
Sacramento	sāk-rah-men'-tō.	Skagway	skag'-way.
Saghalien	sah'-gah-lēn'.	Slocan	slō-kān'.
Saginaw	sag'-in-aw.	Smyrna	smūr'-na.
Saguenay	sag-ē-nā'.	Sofia	so-fē'-ah (so'-fē-yah).
Sahara	sā-hah'-rah.	Sokotra	sō-kō'-trah.
Saigon	sī-gōn'.	Solent	so'-lēt.
St. Augustine	sānt aw'-gūs-tēn.	Somaliland	so-mah'-lē-land.
St. Bernard	sānt bēr'-nard.	Sorel	sō-rēl'.
St. Croix	sānt kroī'.	Soul	seh-ōōl'.
St. Denis	sahn deh-nē'.	Soulanges	sōō lahnzh'.
St. Elias	sānt ē li'-ās.	Souris	sōo'-rē.
St. Helena	sānt hē-lē'-na.	Spey	spā.
St. Hyacinthe	sānt hi'-a-sinth.	Spokane	spō-kān'.
St. Louis	sānt loo'-is.	Sporades	spōr'-ā-dēz.
St. Malo	sahn mah-lō'.	Spree	sprā.
St. Maurice	sahn mō-rēs'.	Stanovoi	stah-no-voi'.
St. Pierre	sahn pē-ār'.	Stettin	stēt-tēn'.
St. Roque	sahn rōk.	Steveston	stēvs'-ton.
Sakhalin	sah-kah-lyn'.	Stewiacke	stew'-ē-ak.
Salamanca	sal-a-man'-ka.	Stikine	stik-ēn'.
		Stockholm	stōk'-hōlm.
		Stour	stoōr.
		Strasbourg	strahs'-boōrg.

NAME	PRONUNCIATION
Stromboli	stróm'-bō-lē.
Stuttgart	stūt'-gahrt.
Suakin	swah'-kēn.
Sudan	soō-dahn'.
Suez	soō-ez'.
Suleiman	soo-la-mahn'.
Sumatra	soo-mah'-trā.
Susquehanna	sūs-kwē'-han'-nah.
Swansea	swon'-sē.
Swaziland	swah'-zē-land.
Syracuse	sir'-ah-kūs.
Syr Daria	sir dahr'-i-ah.
Syria	sir'-i-a.
Tabusintac	tab-ū sin-tak'.
Tacoma	tah-kō'-mah.
Tadoussac	tah-doo-sāk'.
Tahiti	tah-hē'-tē.
Tallahasse	tāl-lā-hās'-se.
Tampico	tām-pē'-kō.
Tananarivo	tah-nah-nah-rē'-vo.
Tanganyika	tahn-ghan-yē'-kah.
Tangier	tahn-jēr'.
Tantramar	tan-trah-mahr'.
Tasmania	taz-mā'-ni-a.
Tatamagouche	tat'-mah-goosh.
Taunton	tahn'-tūn.
Taurus	taw'-rūs.
Teherān	tē-hē-rahū'.
Tehuantepec	tā-wahn-tā-pēk'.
Temiscouata	tēm-is-kwaw'-tah.
Teneriffe	tēn-ēr-if'.
Tennessee	tēn-nēs-sē'.
Terrebonne	tēr-bōn'.
Terre Haute	tēr-rē-hōt.
Thames	tēmz.
Thebes	thēbz.
Theiss	tice.
Thian Shan	tē-ahn shahn'.
Tibet	tīb-et' (tīb-et).
Ticino	tē-chē'-no.
Tientsin	te-en'-tsēn.
Tierra del Fuego	tē-ēr'-rah dēl fwā'-go.
Tiflis	tif-lēs'.
Timiskaming	tīm-is'-kā-ming.
Timor	tē-mōr'.
Titicaca	tit-ē-kah'-kah.
Tobago	tō-bā'-go.
Tobique	tō'-beek.
Tokyo	tō'-kē-o.
Tonquin	tōn-kēn'.
Tormentine	tor'-men-tine.
Torquay	tor-kē'.
Toulon	toō-lōn'.
Toulouse	toō-looz'.
Tours	toōr.
Tracadie	trak'-a-dē.
Trafalgar	traf-al-gahr' (trā-fahl'-gahr).
Transvaal	trans-vahl'.
Trieste	trē-est'.
Tripoli	trip'-o-lē.
Trois Pistoles	twah pēs-tōl'.
Trondhjem	trōn'-yēm.
Trossachs	trōs'-aks.
Troyes	trwah.
Tunis	tū'-nis.
Turin	tū'-rīn.
Turkestan	toōr-kēs-tahn'.
Tyrol	tīr'-ōl.
Ucayali	oō-kah-yah'-lē, or oo-kī-ah'-lē.
Uganda	oō-gahn'-da.
Uist	wist.

NAME	PRONUNCIATION
Ulleswater	ūlz'-waw-ter.
Ungava	ung-gah'-vah.
Upsala	ūp-sah'-lah.
Ural	ū'ral.
Uruguay	ū'-roō-gwā (oō-roō-gwī).
Utrecht	ū'-trēkt.
Valdai	vahl-dī'.
Valencia }	vah'-len'-shī-a.
Valentia }	
Valenciennes	vah-lēn-si-enz' (vah-lahn-si-en').
Valparaiso	vahl-pah-rī'-so.
Vancouver	van-koō'-ver.
Van Diemen's	van dē'-menz.
Vaudreuil	vō-drool' (vō-drū'-y).
Venezuela	vēn-ez-wē'-lah.
Vera Cruz	vēr'-ah krōōz.
Verchères	vēr-shar'.
Vermont	vēr-mōnt'.
Versailles	vēr sālz (vēr-sah'y).
Verte	vért.
Vesuvius	vē-sū'-vī-ūs.
Vienna	vē-ēn'-nah.
Vindhya	vind'-yah.
Vistula	vīs'-tū-la.
Vitoria	vē-to'-rē-ah.
Vladivostok	vlah-dē-vōs-tōk'.
Vosges	vōzh.
Wabash	waw'-bāsh.
Wabigoon	waw'-bī-goōn.
Wallachia	wōl-lā'-kī-a.
Warsaw	wawr'-saw.
Warwick	waw'-rik (wawr'-wik).
Wasatch	waw'-satch.
Washademoak	wōsh-ā-dē-moik'.
Wear	wēr.
Weimar	wī'-mahr (vī'mahr).
Welland	wel'-land.
Wener	wā'-ner (vē'-ner).
Weser	vā'-zer.
Wetaskiwin	we-tas'-kī-wīn.
Wetter	wet'-ter (vē'-ter).
Whycocomagh	why-kog'-o-mah.
Wichita	witch'-ī-taw.
Wiesbaden	ves-bah'-den.
Wight	wīt.
Winnipegosis	wīn-nī-pē-gō'-sis.
Wollaston	wōl'-las-ton.
Woolwich	woōl'-itch (wool-ij).
Worcester	woōs'-ter.
Wyoming	wī-ō'-ming.
Xalapa	chah-lah'-pah.
Xeres	cher-es'.
Yablonoī	yah-blo-noī'.
Yakutsk	yah-koōtsk'.
Yamaska	yah-mahs'-kah.
Yang-tse Kiang	yāng-tse-kī-ang'.
Yenisei	yēn-ē-sā'-ē.
Yokohama	yō-kō-hah'-mah.
Yosemite	yō-sēm'-ī-tē.
Youghal	yawl (yōh'-hāl).
Yucatan	yoō-kah-tahn'.
Zaandam	zahn-dahm'.
Zacatecas	zakh-ā-tā'-kas.
Zambesi	zahm-bā'-zē (zahm-bē'-zē).
Zante	zahn'-tē.
Zanzibar	zahn-zī-bahr'.
Zuider Zee	zī'-der zē.
Zurich	zoō'rik.

